SERVICE MANUAL

PLASMA DISPLAY MONITOR

BASIC CHASSIS
P1

GD-V4210PZW GD-V4210PZW-G
GD-V4210PCE GD-V4211PCE

Supplementary

These models corresponded to the printed circuit board exchange in the PDP unit.
Therefore, this service manual describes only the information relevant to it.
For details other than those described in this manual, please refer to the GD-V4210PZW,

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NOTES AT THE TIME OF PW BOARD EXCHANGE

It will become the cause of failure if dust adheres to the inside of a connector, or a flat wire and a point-of-contact part.
When the PW board is exchanged, be careful of the dust and dirt of the inside of a connector, or a flat wire and a point-of-contact part enough.

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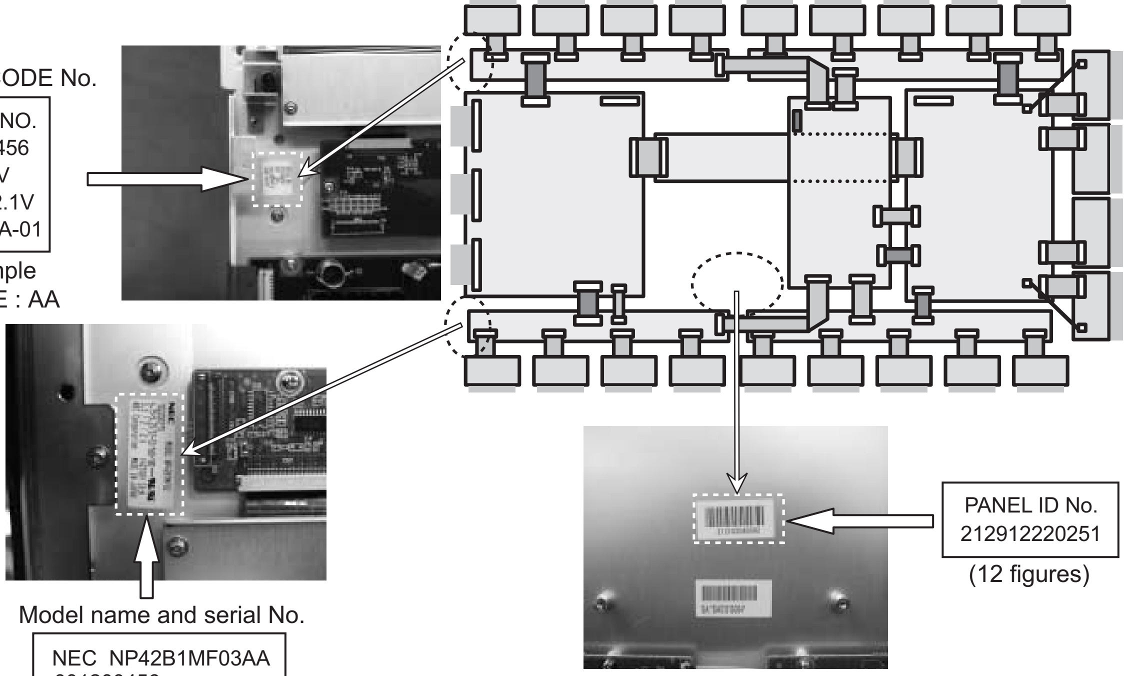
No.51767
2004/8

■CONFIRMING MODEL NAME, SERIAL NUMBER, ID NUMBER AND CODE NUMBER

NOTE : The panel's ID number is used when you reference the characteristic voltage value of the panel on web site.



Voltage and CODE No.

SERIAL NO.
001200456
Vd=70V
Vs=182.1V
CODE AA-01

For example
CODE : AA

PANEL ID No.
212912220251

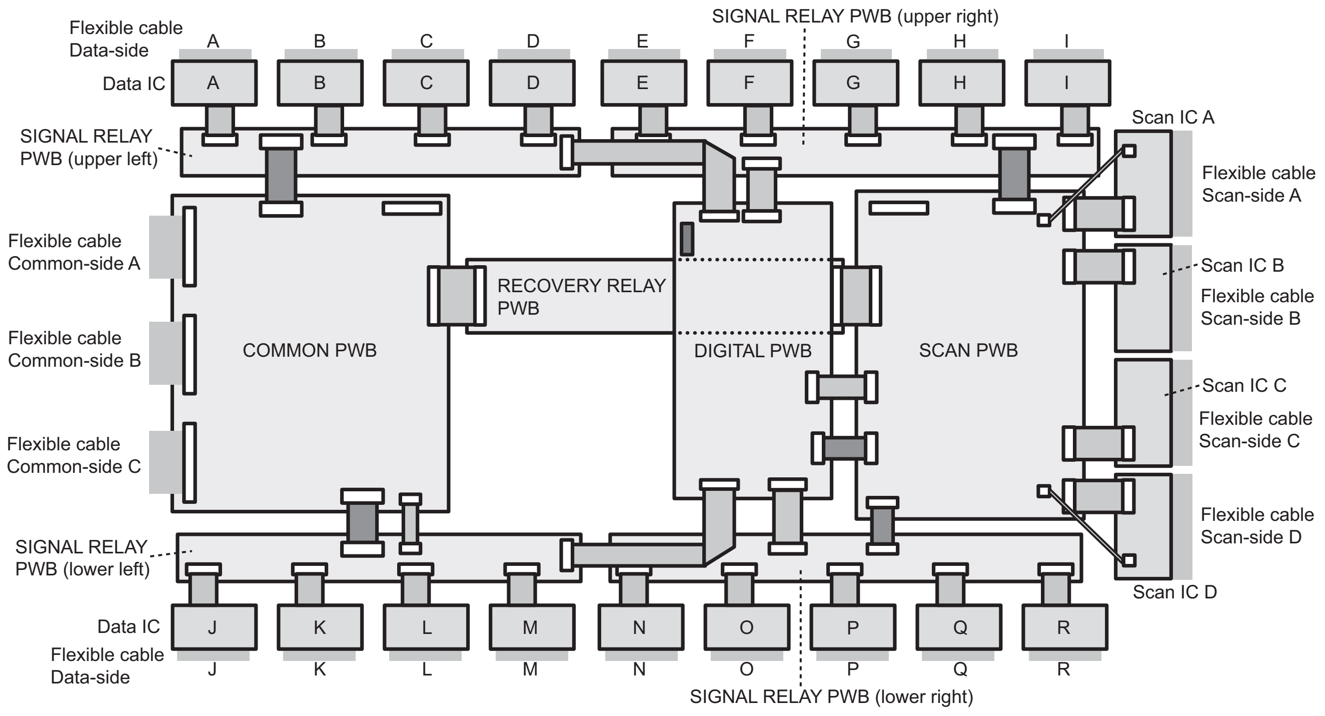
(12 figures)

Model name and serial No.

NEC NP42B1MF03AA
001200456
****
****
****

For example
Model : NP42B1MF03AA
Serial No. : 001200456 (9 figures)

■MAIN PARTS LOCATION


SIGNAL RELAY PWB (upper right)
Flexible cable
Data-side
A B C D E F G H I
Data IC
A B C D E F G H I
Scan IC A
SIGNAL RELAY
PWB (upper left)
Flexible cable
Scan-side A
Flexible cable
Common-side A
RECOVERY RELAY
PWB
Scan IC B
Flexible cable
Scan-side B
Flexible cable
Common-side B
COMMON PWB
DIGITAL PWB
SCAN PWB
Scan IC C
Flexible cable
Scan-side C
Flexible cable
Common-side C
Flexible cable
Scan-side D
SIGNAL RELAY
PWB (lower left)
Scan IC D
Data IC
J K L M N O P Q R
Flexible cable
Data-side
J K L M N O P Q R
SIGNAL RELAY PWB (lower right)

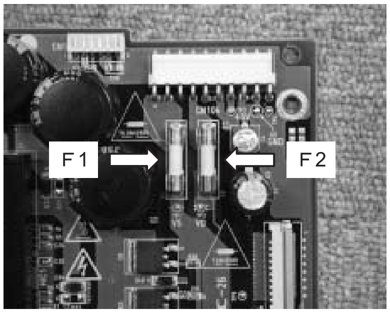
■INSPECTION OF COMPONENTS ON THE PW BOARD

Diagnose the PW board in PDP unit by checking defects based on the following items.

1. INSPECTION OF FUSES

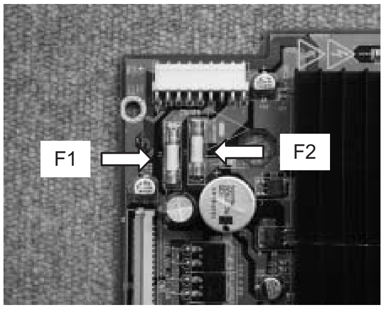
Measure the resistance of each fuse with a circuit tester, and check OK or NG.

1.1 Glass fuses (F1, F2) on the COMMON PWB



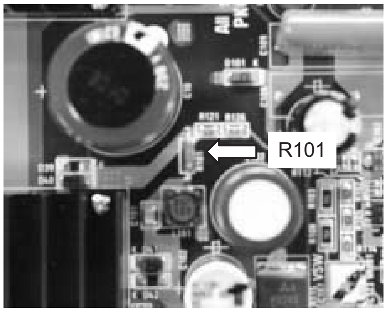
OK: Short
NG: Open

1.2 Glass fuses (F1, F2) on the SCAN PWB



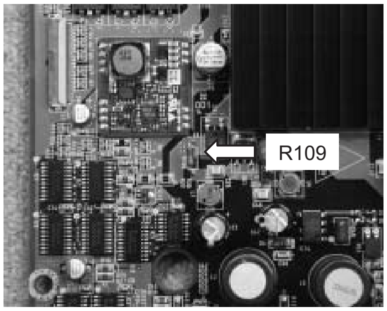
OK: Short
NG: Open

1.3 Fuse resistance (R101) on the COMMON PWB



R101
OK: Approx. 2Ω
NG: Open

1.4 Fuse resistance (R109) on the COMMON PWB

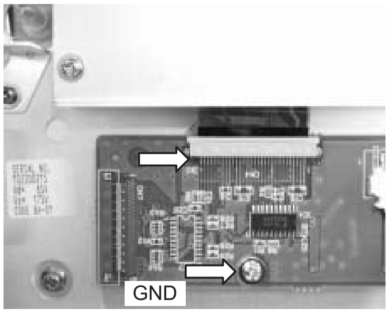


R109
OK: Approx. 2Ω
NG: Open

2. INSPECTION OF ALARM LINES

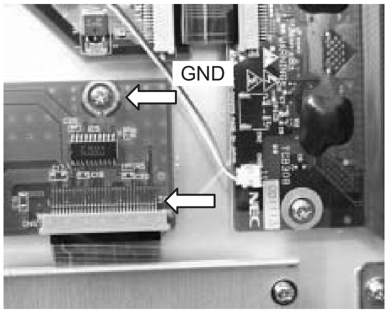
According to the following procedures, measure with a circuit tester and check OK or NG.

2.1 The conduction between the pin 30 of the connector [CN4] and GND on the SIGNAL RELAY PWB (upper left)



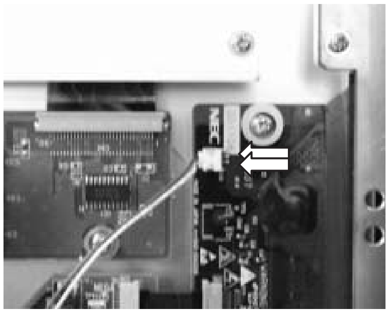
OK: Short
NG: Open

2.2 The conduction between the pin 30 of the connector [CN5] and GND on the SIGNAL RELAY PWB (lower right)



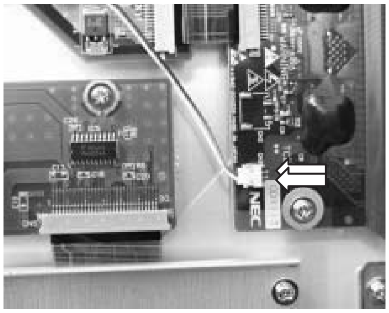
OK: Short
NG: Open

2.3 The conduction between the pins of CN3 on the scan IC [A]



OK: Short
NG: Open

2.4 The conduction between the pins of CN3 on the scan IC [D]

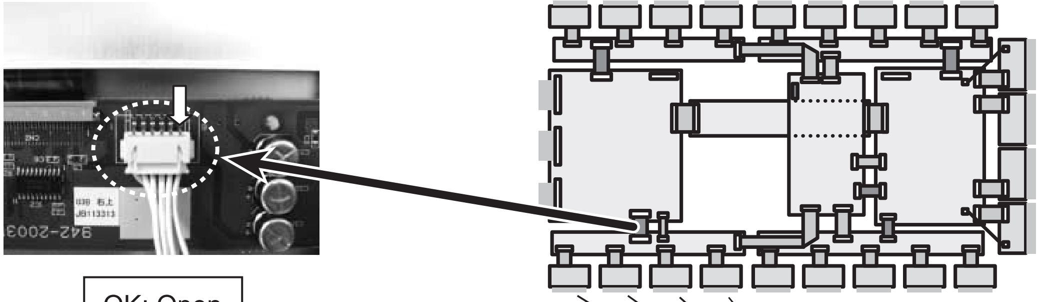


OK: Short
NG: Open

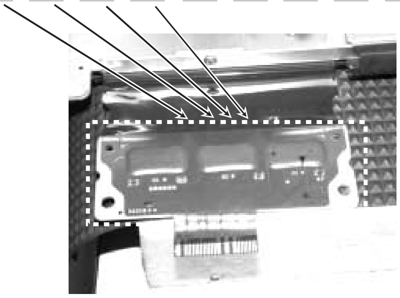
3. INSPECTION OF DATA ICS

According to the following procedures, measure with a circuit tester and check OK or NG.

Check the pin 4 or pin 5 of the connector [CN8] on the SIGNAL RELAY PWB (lower left).



OK: Open
NG: Short



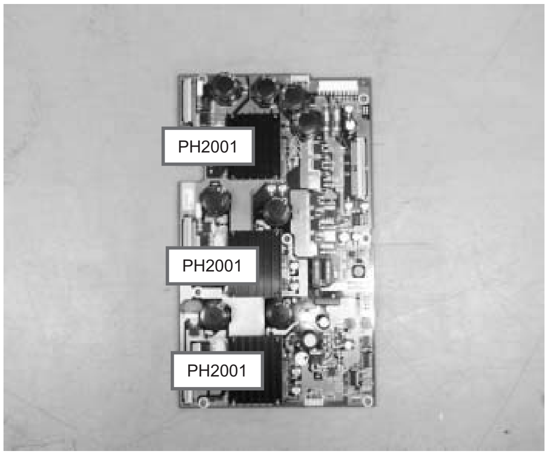
Detach the connector [CN8] or [CN9] on each of the SIGNAL RELAY PWBs (for example : lower left board) and check the conduction between the pin 4 (or pin 5) and the ground.
In case of "short", one of the data ICs connecting the SIGNAL RELAY PWB may be defective, and you should check whether there is any trace of damage on the data IC's surface after removing the heat-sink on the data IC.

4. INSPECTION OF POWER ICS

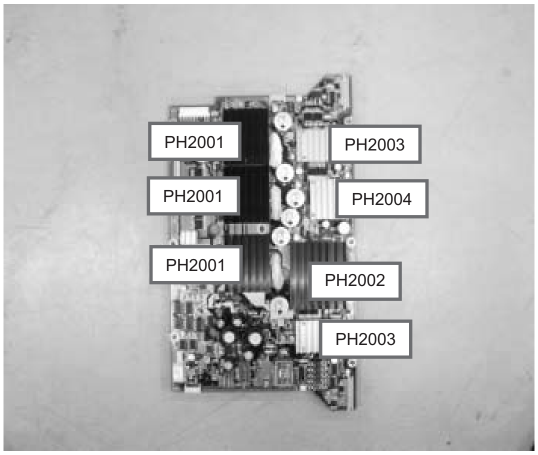
According to the following procedures, measure with a circuit tester and check OK or NG.

The allocation of power ICs to be checked is shown below.

COMMON PWB

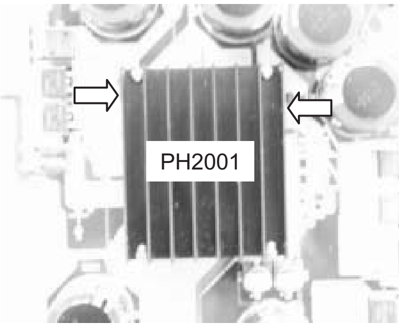


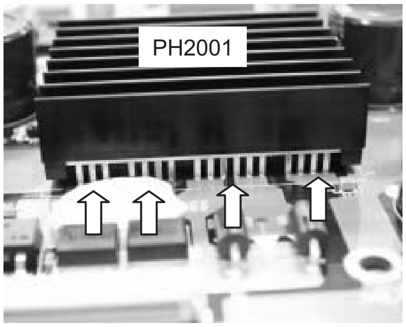
SCAN PWB

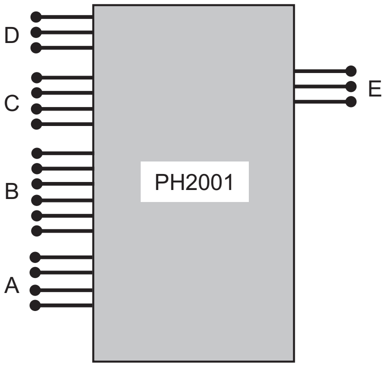


4.1 PH2001 on the COMMON PWB

Check each point of power IC as shown below.






D
C
B
A
E
PH2001

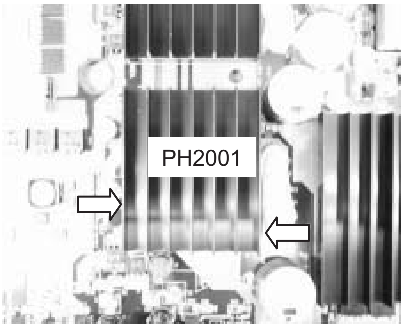
Check point

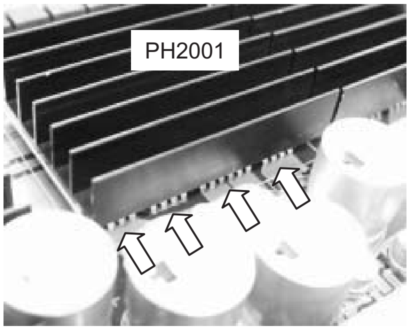
Between
A - B
B - C
D - E

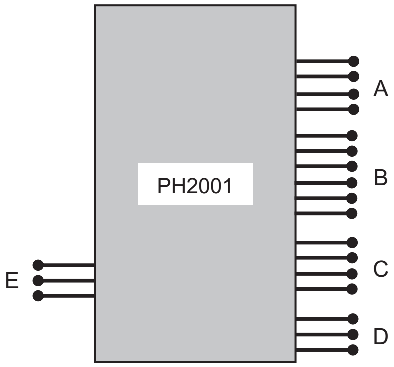
OK: Over 1kΩ
NG: Short

4.2 PH2001 on the SCAN PWB

Check each point of power IC as shown below.






A
B
C
D
E
PH2001

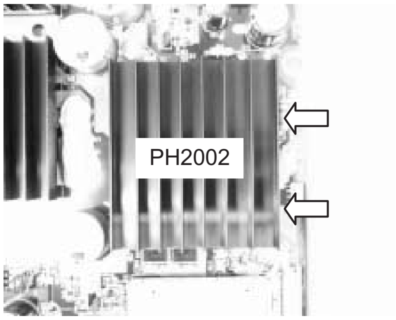
Check point

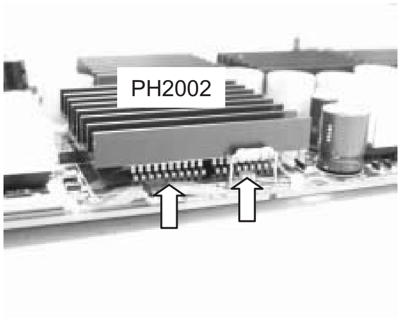
Between
A - B
B - C
D - E

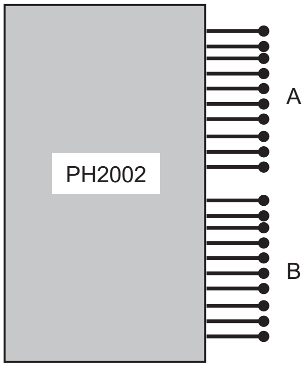
OK: Over 1kΩ
NG: Short

4.3 PH2002 on the SCAN PWB

Check each point of power IC as shown below.







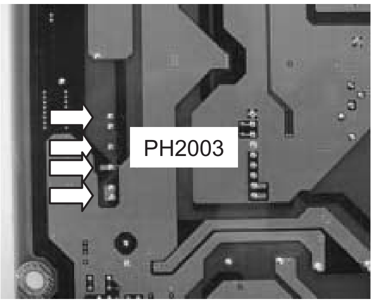
Check point

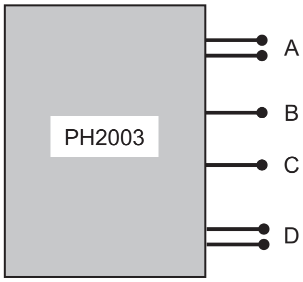
Between
A - B

OK: Over 1kΩ
NG: Short

4.4 PH2003 on the SCAN PWB

Turn over the board and check each point of power IC as shown below.




PH2003
A
B
C
D

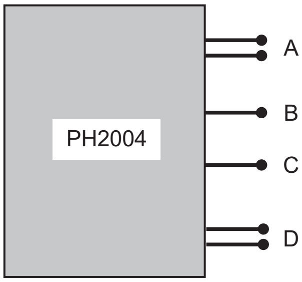
Check point

Between
A - B
C - D

OK: Over 1kΩ
NG: Short

4.5 PH2004 on the SCAN PWB

Turn over the board and check each point of power IC as shown below.


PH2004
A
B
C
D

Check point

Between
A - B
C - D

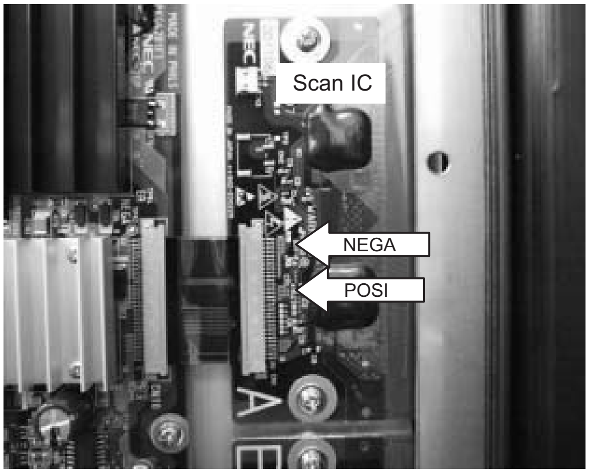
OK: Over 1kΩ
NG: Short

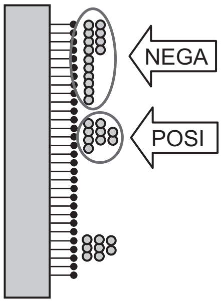
5. INSPECTION OF SCAN IC DRIVERS

According to the following procedures, measure and check OK or NG.

5.1 Scan IC drivers [A-D]

Check each point with a circuit tester as shown below.



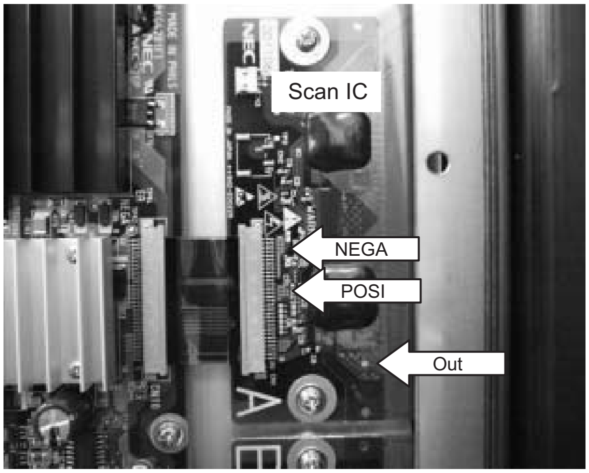


Check point

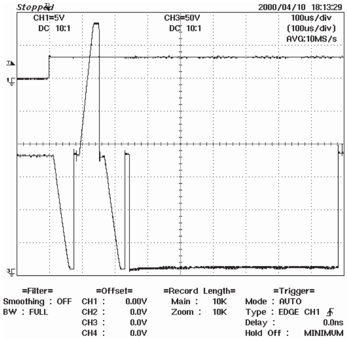
Between NEGA - POSI

OK: Over 1kΩ
NG: Short

Measure the waveform of each point with a oscilloscope as shown below.

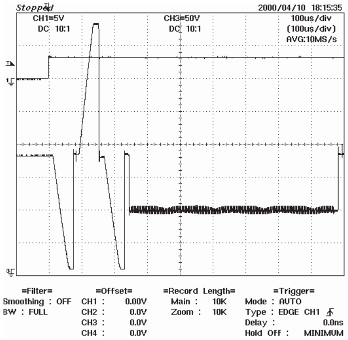


NEGA



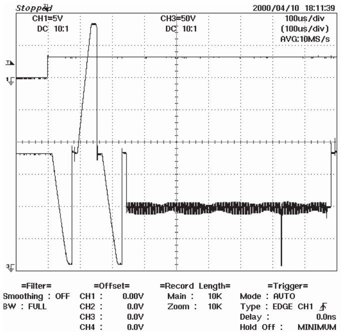
```
  =Filter=          =Offset=       =Record Length=      =Trigger=
Smoothing : OFF  CH1 :    0.00V     Main :   10K     Mode : AUTO
BW : FULL        CH2 :     0.0V     Zoom :   10K     Type : EDGE CH1
                 CH3 :     0.0V                      Delay :        0.0ns
                 CH4 :     0.0V                      Hold Off :   MINIMUM
```

POSI



```
  =Filter=          =Offset=       =Record Length=      =Trigger=
Smoothing : OFF  CH1 :    0.00V     Main :   10K     Mode : AUTO
BW : FULL        CH2 :     0.0V     Zoom :   10K     Type : EDGE CH1
                 CH3 :     0.0V                      Delay :        0.0ns
                 CH4 :     0.0V                      Hold Off :   MINIMUM
```

OUT



```
  =Filter=          =Offset=       =Record Length=      =Trigger=
Smoothing : OFF  CH1 :    0.00V     Main :   10K     Mode : AUTO
BW : FULL        CH2 :     0.0V     Zoom :   10K     Type : EDGE CH1
                 CH3 :     0.0V                      Delay :        0.0ns
                 CH4 :     0.0V                      Hold Off :   MINIMUM
```

■DISASSEMBLY PROCEDURE

1. Removing the COMMON PWB
   (1) Detach the 7 connectors.
   (2) Remove the 8 screws [A].
   (3) Remove the COMMON PWB.

2. Removing the DIGITAL PWB
   (1) Detach the 6 connectors.
   (2) Remove the 6 screws [B].
   (3) Remove the DIGITAL PWB.

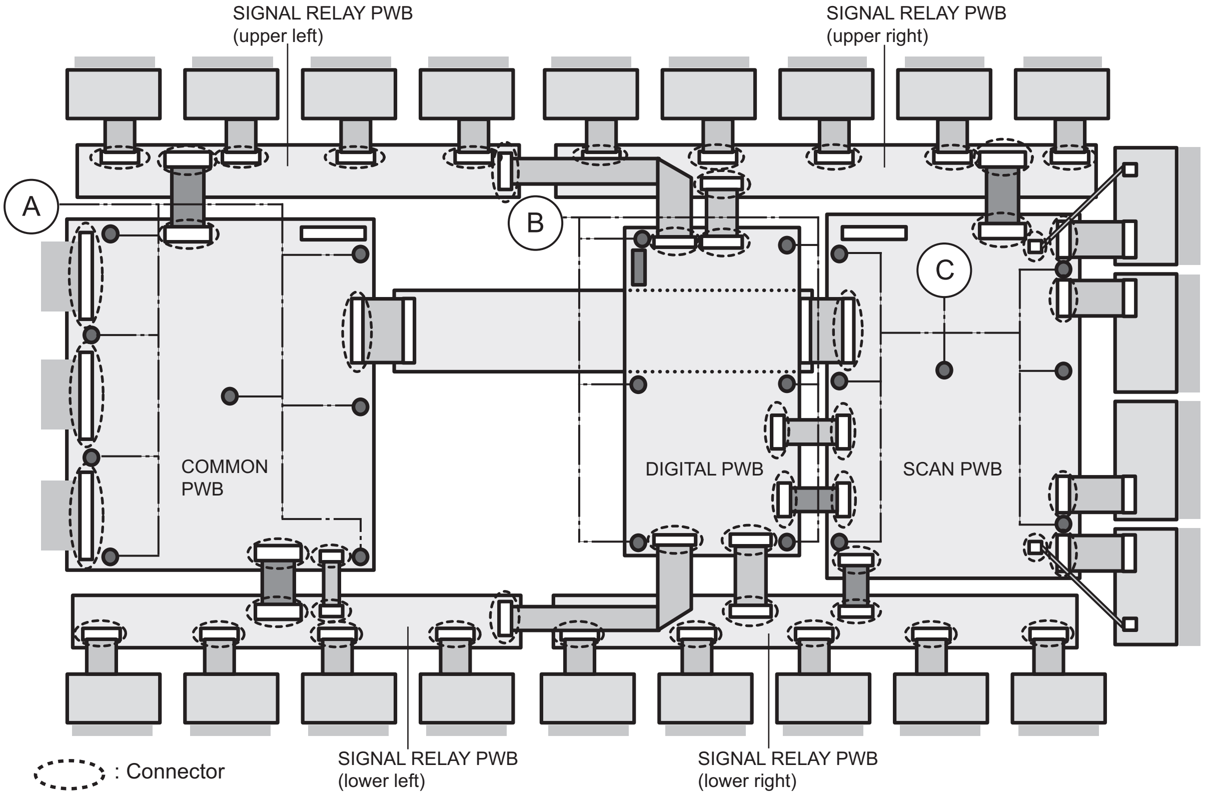
3. Removing the SCAN PWB
   (1) Detach the 11 connectors.
   (2) Remove the 7 screws [C].
   (3) Remove the SCAN PWB.

4. Removing the SIGNAL RELAY PWB (upper left)
   (1) Detach the 6 connectors.
   (2) Remove the SIGNAL RELAY PWB (upper left).

5. Removing the SIGNAL RELAY PWB (upper right)
   (1) Detach the 7 connectors.
   (2) Remove the SIGNAL RELAY PWB (upper right).

6. Removing the SIGNAL RELAY PWB (lower left)
   (1) Detach the 7 connectors.
   (2) Remove the SIGNAL RELAY PWB (lower left).

7. Removing the SIGNAL RELAY PWB (lower right)
   (1) Detach the 7 connectors.
   (2) Remove the SIGNAL RELAY PWB (lower right).



SIGNAL RELAY PWB (upper left)
SIGNAL RELAY PWB (upper right)
A
B
C
COMMON PWB
DIGITAL PWB
SCAN PWB
: Connector
SIGNAL RELAY PWB (lower left)
SIGNAL RELAY PWB (lower right)

Notes : Check the state of the detached cables and connectors.

(1) Check any dirt or peeling in the contact part of the flat cable, and any crack, crease, disconnection and short-circuit of wires.
(2) Check any foreign substance in the connector's contact .
(3) Check the state of plugging the flat cable into the connector, and confirm it locks completely.

■CONFIRMING REFERENCE VOLTAGE

Each PDP panel has the characteristic voltage value.
In the adjustment after fix or exchange of a PW board, this voltage value is used as reference.
You can get it from the vendor's web site on the Internet.

1. Getting the characteristic voltage value of the PDP unit

1.1 Access the following address by the Web browser of your PC.
http://203.126.119.92/necpd/

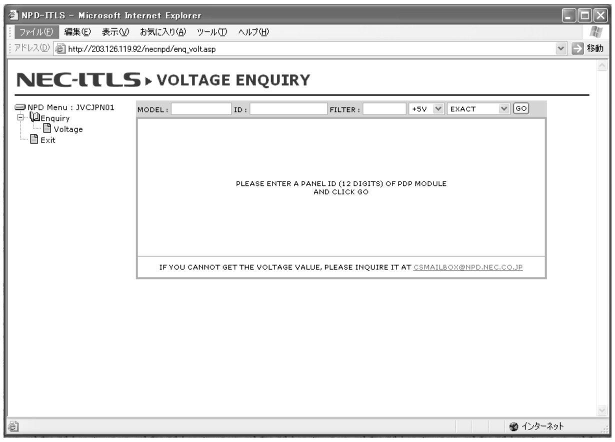
1.2 After [NEC-ITLS] screen is displayed, click "Click here to log on to NPD". (Fig. 1)

1.3 Type the following user name and password into the dialog box and click "Enter" button. (Fig. 2)
Username: JVCJPN01
Password: jvckoseki (lower-case)

1.4 After [WELCOME TO NEC-ITLS] is displayed (Fig. 3), click the "Voltage" icon in the "Enquiry" holder on the upper left part of the window. (Fig. 4)

1.5 After [VOLTAGE ENQUIRY] is displayed (Fig. 5), enter the panel ID number, which is shown on the panel (refer to page 2), into the dialog box and click "GO".

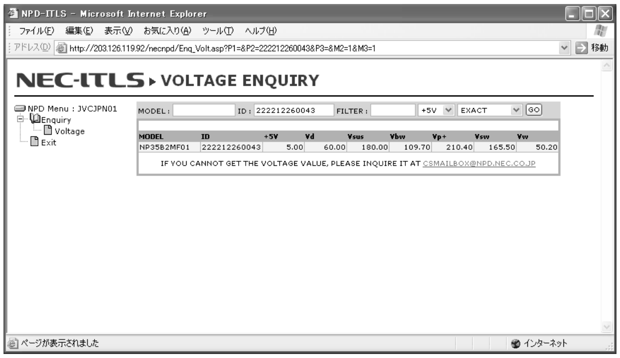
1.6 Then, the characteristic voltage value will be displayed. (Fig. 6)


NPD-ITLS – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://203.126.119.92/necnpd/enq_volt.asp
移動
NEC-ITLS ▸ VOLTAGE ENQUIRY
NPD Menu : JVCJPN01
Enquiry
Voltage
Exit
MODEL :
ID :
FILTER :
+5V
EXACT
GO
インターネット

PLEASE ENTER A PANEL ID (12 DIGITS) OF PDP MODULE AND CLICK GO

IF YOU CANNOT GET THE VOLTAGE VALUE, PLEASE INQUIRE IT AT CSMAILBOX@NPD.NEC.CO.JP

Fig. 5


NPD-ITLS – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://203.126.119.92/necnpd/Enq_Volt.asp?P1=&P2=222212260043&P3=&M2=1&M3=1
移動
NEC-ITLS ▸ VOLTAGE ENQUIRY
NPD Menu : JVCJPN01
Enquiry
Voltage
Exit
+5V
EXACT
GO
ページが表示されました
インターネット

MODEL :
ID : 222212260043
FILTER :

MODEL	ID	+5V	Vd	Vsus	Vbw	Vp+	Vsw	Vw
NP35B2MF01	222212260043	5.00	60.00	180.00	109.70	210.40	165.50	50.20

IF YOU CANNOT GET THE VOLTAGE VALUE, PLEASE INQUIRE IT AT CSMAILBOX@NPD.NEC.CO.JP

Fig. 6

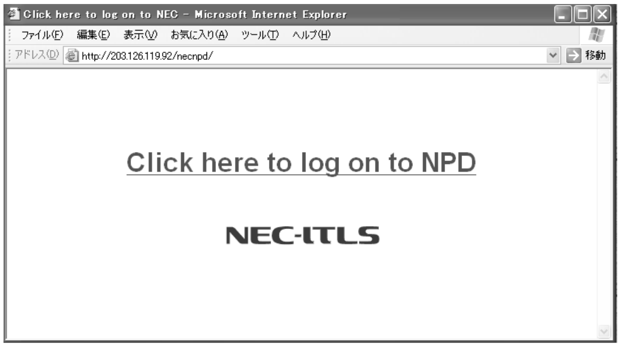

Click here to log on to NEC – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://203.126.119.92/necnpd/
移動
Click here to log on to NPD
NEC-ITLS

Fig. 1

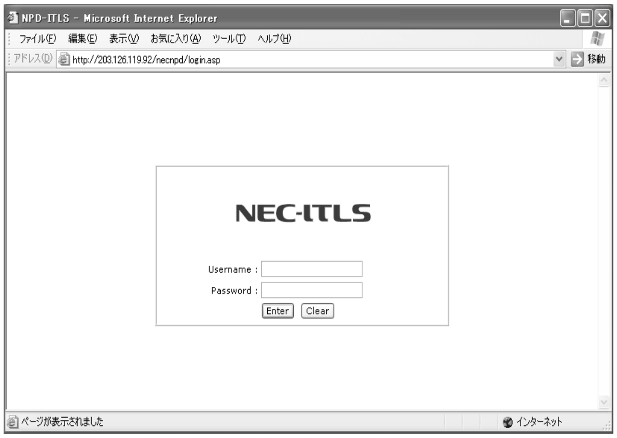
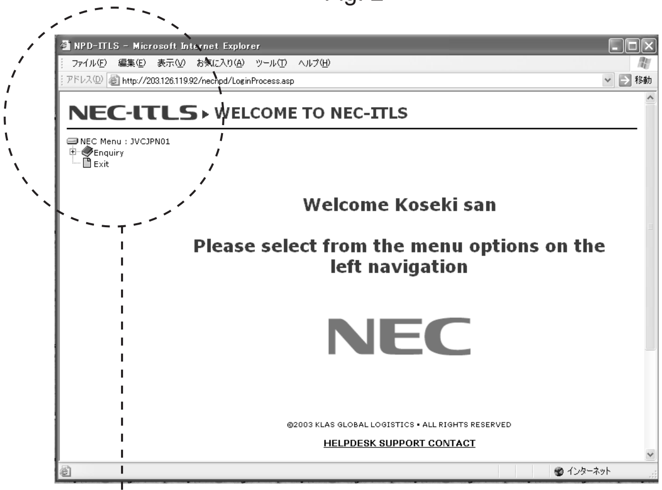

NPD-ITLS – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://203.126.119.92/necnpd/login.asp
移動
NEC-ITLS
Username :
Password :
Enter
Clear
ページが表示されました
インターネット

Fig. 2


NPD-ITLS – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A) ツール(T) ヘルプ(H)
アドレス(D) http://203.126.119.92/necnpd/LoginProcess.asp
移動
NEC-ITLS ▸ WELCOME TO NEC-ITLS
NEC Menu : JVCJPN01
Enquiry
Exit
NEC
HELPDESK SUPPORT CONTACT
インターネット

Welcome Koseki san

Please select from the menu options on the left navigation

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Fig. 3

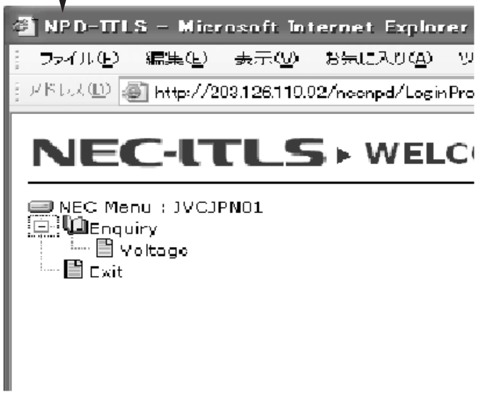
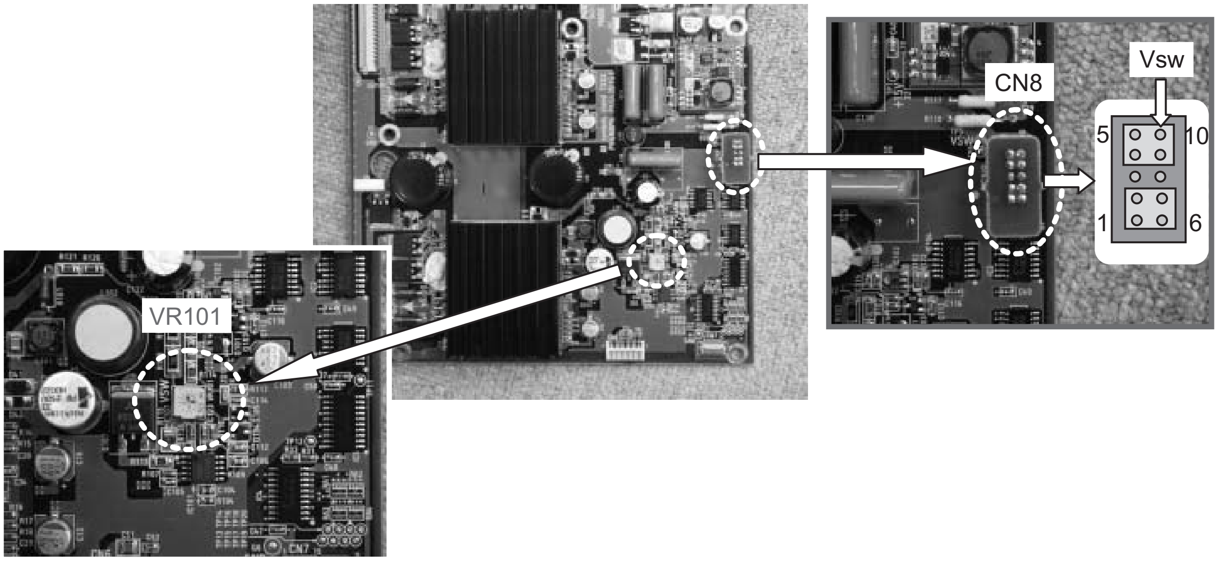
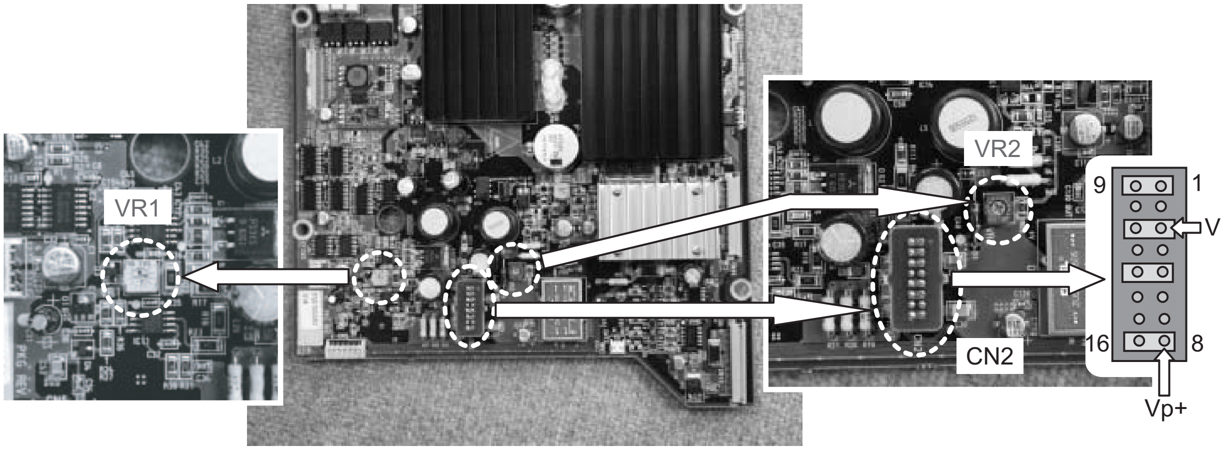
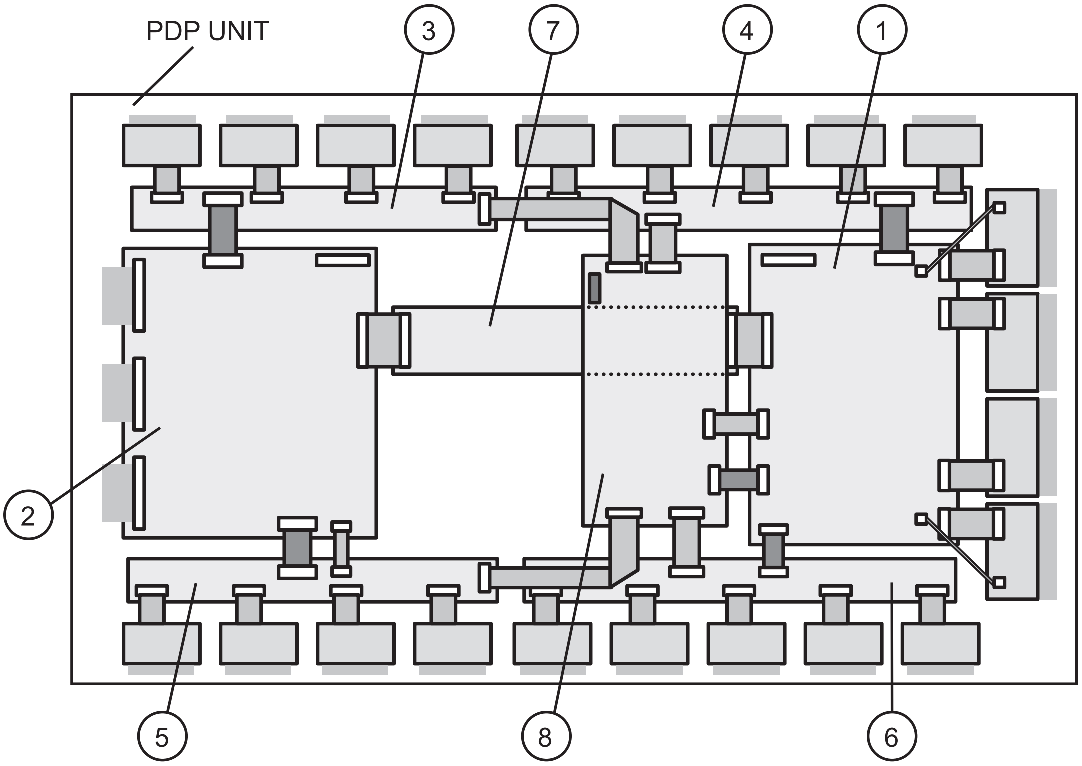

NPD-ITLS – Microsoft Internet Explorer
ファイル(F) 編集(E) 表示(V) お気に入り(A)
アドレス(D) http://203.126.110.92/necnpd/LoginPro
NEC-ITLS ▸ WELC
NEC Menu : JVCJPN01
Enquiry
Voltage
Exit

Fig. 4

■ADJUSTMENTS

<table>
<tr><th>Item</th><th>Measuring instrument</th><th>Test point</th><th>Adjustment part</th><th>Description</th></tr>
<tr><td>Vsw
VOLTAGE
ADJUSTMENT</td><td>DC voltmeter</td><td>CN8
-pin 10
GND
[COMMON PWB]</td><td>VR101
[COMMON PWB]</td><td>(1) Measure the voltage between the pin 10 of the connector [CN8] and GND on the COMMON PWB.
(2) Adjust the voltage same as the reference data of Vsw shown in web site by VR101.
※The adjustment accuracy is within ±0.5V.</td></tr>
<tr><td colspan="5"> </td></tr>
<tr><td>Vbw / Vp+
VOLTAGE
ADJUSTMENT</td><td>DC voltmeter</td><td>CN2
-pin 3(Vbw)
-pin 8 (Vp+)
GND
[SCAN PWB]</td><td>VR2 (Vbw)
VR1 (Vp+)
[SCAN PWB]</td><td>(1) Measure the voltage between the pin 3 of the connector [CN2] and GND on the SCAN PWB.
(2) Adjust the voltage same as the reference data of Vbw shown in web site by VR2.
※The adjustment accuracy is within ±0.5V.
(3) Measure the voltage between the pin 8 of CN2 and GND on the SCAN PWB.
(4) Adjust the voltage same as the reference data of Vp+ shown in web site by VR1.
※The adjustment accuracy is within ±1.5V.</td></tr>
<tr><td colspan="5"> </td></tr>
</table>

■PARTS LIST



⚠	Ref No.	Parts No.	Parts name	Description
⚠	1	NE-9S899485	SCAN PWB	
⚠	2	NE-9S899631	COMMON PWB	
⚠	3	NE-9S899329	SIGNAL RELAY PWB	(upper left)
⚠	4	NE-9S899325	SIGNAL RELAY PWB	(upper right)
⚠	5	NE-9S899331	SIGNAL RELAY PWB	(lower left)
⚠	6	NE-9S899327	SIGNAL RELAY PWB	(lower right)
⚠	7	NE-9S899446	RECOVERY RELAY PWB	
⚠	8	NE-9S899632	DIGITAL PWB	

NOTES AT THE TIME OF PW BOARD EXCHANGE

It will become the cause of failure if dust adheres to the inside of a connector, or a flat wire and a point-of-contact part.

When the PW board is exchanged, be careful of the dust and dirt of the inside of a connector, or a flat wire and a point-of-contact part enough.

Victor Company of Japan, Limited
AV & MULTIMEDIA COMPANY VIDEO DISPLAY CATEGORY 12, 3-chome, Moriya-cho, kanagawa-ku, Yokohama, kanagawa-prefecture, 221-8528, Japan

Printed in Japan
WPC

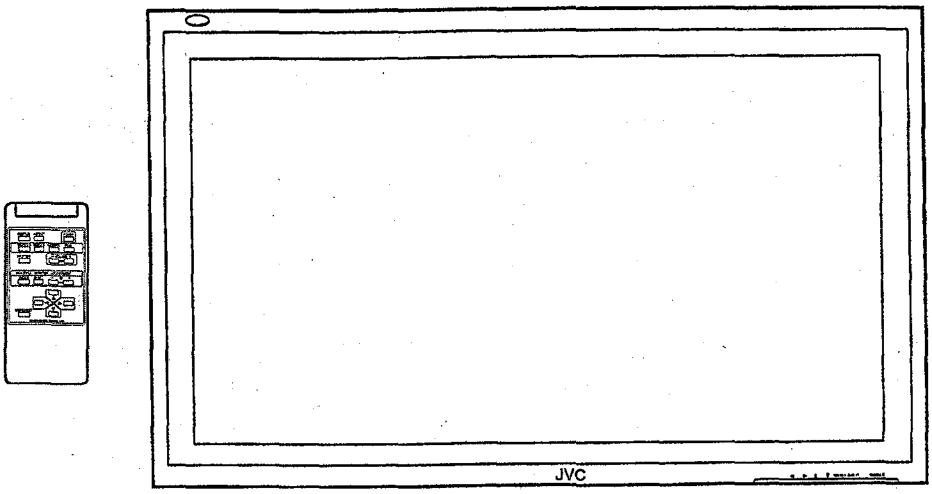
JVC

SERVICE MANUAL

42" PLASMA DISPLAY MONITOR

BASIC CHASSIS
P1

GD-V4210PZW/GD-V4210PZW-G
GD-V4210PCE/GD-V4210PCE-G



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- ★ OPERATING INSTRUCTIONS(APPENDIX) ········· 1-1
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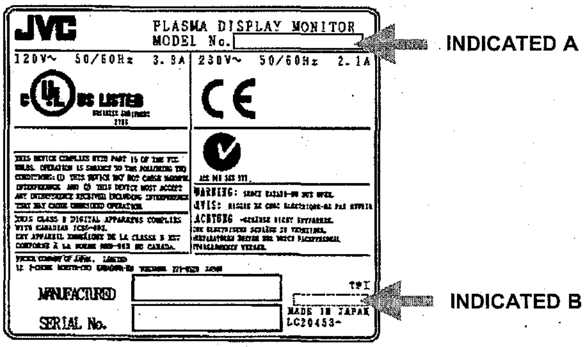
No.51767
Oct. 2000

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

HOW TO IDENTIFY MODELS

<table>
<tr><th>⚠</th><th>MODEL
Parts name</th><th>GD-V4210PZW</th><th>GD-V4210PZW-G</th><th>GD-V4210PCE</th><th>GD-V4210PCE-G</th></tr>
<tr><td>⚠</td><td>RATING LABEL</td><td>LC20453-008B</td><td>LC20453-009B</td><td>LC20453-010B</td><td>LC20453-011B</td></tr>
<tr><td></td><td>INDICATED A</td><td>GD-V4210PZW</td><td>GD-V4210PZW-G</td><td>GD-V4210PCE</td><td>GD-V4210PCE-G</td></tr>
<tr><td></td><td></td><td colspan="4">
JVC
PLASMA DISPLAY MONITOR
MODEL No.
120V~ 50/60Hz 3.9A
230V~ 50/60Hz 2.1A
US LISTED
CE
WARNING:
AVIS:
ACHTUNG
MANUFACTURED
SERIAL No.
MADE IN JAPAN
LC20453-
INDICATED A
INDICATED B

</td></tr>
<tr><td></td><td>INDICATED B</td><td>GD-V4210PZW</td><td>GD-V4210PZW-G</td><td>GD-V4210PCE</td><td>GD-V4210PCE-G</td></tr>
<tr><td></td><td>FRONT PANEL ASSY</td><td>LC10528-005A</td><td>LC10528-006A</td><td>LC10528-005A</td><td>LC10528-006A</td></tr>
<tr><td></td><td>CONTROL BASE ASSY</td><td>LC20358-001B</td><td>LC20358-002A</td><td>LC20358-001B</td><td>LC20358-002A</td></tr>
<tr><td></td><td>TERMINAL PANEL</td><td>LC20694-001B</td><td>LC20694-001B</td><td>LC20694-002A</td><td>LC20694-002A</td></tr>
<tr><td></td><td>TERMINAL PB ASSY</td><td>FX-6070A</td><td>FX-6070A</td><td>-</td><td>-</td></tr>
<tr><td></td><td>TAP SCREW</td><td>QYSPSD3012Z (X2)</td><td>QYSPSD3012Z (X2)</td><td>-</td><td>-</td></tr>
<tr><td></td><td>SCREW</td><td>QYSPSD3008Z (X2)</td><td>QYSPSD3008Z (X2)</td><td>-</td><td>-</td></tr>
<tr><td></td><td>TOP CARTON</td><td>LC20255-005A</td><td>LC20255-005A</td><td>LC20255-006A</td><td>LC20255-006A</td></tr>
<tr><td></td><td>CARTON LABEL</td><td>-</td><td>LC40661-001A</td><td>-</td><td>LC40661-001A</td></tr>
</table>

SAFETY PRECAUTIONS

1. The design of this product contains special hardware, many circuits and components specially for safety purposes. For continued protection, no changes should be made to the original design unless authorized in writing by the manufacturer. Replacement parts must be identical to those used in the original circuits. Service should be performed by qualified personnel only.

2. Alterations of the design or circuitry of the products should not be made. Any design alterations or additions will void the manufacturer's warranty and will further relieve the manufacturer of responsibility for personal injury or property damage resulting therefrom.

3. Many electrical and mechanical parts in the products have special safety-related characteristics. These characteristics are often not evident from visual inspection nor can the protection afforded by them necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts which have these special safety characteristics are identified in the parts list of Service manual. **Electrical components having such features are identified by shading on the schematics and by (⚠) on the parts list in Service manual.** The use of a substitute replacement which does not have the same safety characteristics as the recommended replacement part shown in the parts list of Service manual may cause shock, fire, or other hazards.

4. **Don't short between the LIVE side ground and ISOLATED (NEUTRAL) side ground or EARTH side ground when repairing.**
   Some model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND, the ISOLATED(NEUTRAL) : (⏚) side GND and EARTH : (⊜) side GND. Don't short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND and never measure with a measuring apparatus (oscilloscope etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND or EARTH side GND at the same time.
   If above note will not be kept, a fuse or any parts will be broken.

5. If any repair has been made to the chassis, it is recommended that the B1 setting should be checked or adjusted (See ADJUSTMENT OF B1 POWER SUPPLY).

6. The high voltage applied to the picture tube must conform with that specified in Service manual. Excessive high voltage can cause an increase in X-Ray emission, arcing and possible component damage, therefore operation under excessive high voltage conditions should be kept to a minimum, or should be prevented. If severe arcing occurs, remove the AC power immediately and determine the cause by visual inspection (incorrect installation, cracked or melted high voltage harness, poor soldering, etc.). To maintain the proper minimum level of soft X-Ray emission, components in the high voltage circuitry including the picture tube must be the exact replacements or alternatives approved by the manufacturer of the complete product.

7. Do not check high voltage by drawing an arc. Use a high voltage meter or a high voltage probe with a VTVM. Discharge the picture tube before attempting meter connection, by connecting a clip lead to the ground frame and connecting the other end of the lead through a 10kΩ 2W resistor to the anode button.

8. When service is required, observe the original lead dress. Extra precaution should be given to assure correct lead dress in the high voltage circuit area. Where a short circuit has occurred, those components that indicate evidence of overheating should be replaced. Always use the manufacturer's replacement components.

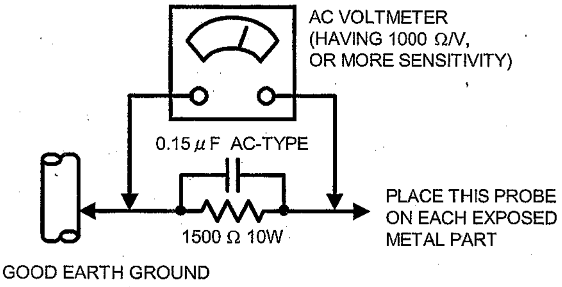
9. **Isolation Check**
   (Safety for Electrical Shock Hazard)
   After re-assembling the product, always perform an isolation check on the exposed metal parts of the cabinet (antenna terminals, video/audio input and output terminals, Control knobs, metal cabinet, screwheads, earphone jack, control shafts, etc.) to be sure the product is safe to operate without danger of electrical shock.

(1) **Dielectric Strength Test**
The isolation between the AC primary circuit and all metal parts exposed to the user, particularly any exposed metal part having a return path to the chassis should withstand a voltage of 3000V AC (r.m.s.) for a period of one second.
(. . . . Withstand a voltage of 1100V AC (r.m.s.) to an appliance rated up to 120V, and 3000V AC (r.m.s.) to an appliance rated 200V or more, for a period of one second.)
This method of test requires a test equipment not generally found in the service trade.

(2) **Leakage Current Check**
Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Using a "Leakage Current Tester", measure the leakage current from each exposed metal part of the cabinet, particularly any exposed metal part having a return path to the chassis, to a known good earth ground (water pipe, etc.). Any leakage current must not exceed 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.2mA AC (r.m.s.).

- **Alternate Check Method**

Plug the AC line cord directly into the AC outlet (do not use a line isolation transformer during this check.). Use an AC voltmeter having 1000 ohms per volt or more sensitivity in the following manner. Connect a 1500Ω 10W resistor paralleled by a 0.15μF AC-type capacitor between an exposed metal part and a known good earth ground (water pipe, etc.). Measure the AC voltage across the resistor with the AC voltmeter. Move the resistor connection to each exposed metal part, particularly any exposed metal part having a return path to the chassis, and measure the AC voltage across the resistor. Now, reverse the plug in the AC outlet and repeat each measurement. Any voltage measured must not exceed 0.75V AC (r.m.s.). This corresponds to 0.5mA AC (r.m.s.).
However, in tropical area, this must not exceed 0.3V AC (r.m.s.). This corresponds to 0.2mA AC (r.m.s.).



SPECIFICATIONS

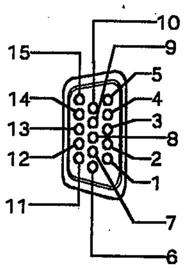
Item		Content	
Model		**GD-V4210PZW / GD-V4210PZW-G**	**GD-V4210PCE / GD-V4210PCE-G**
Dimension		103.5cm (40-3/4") × 64.0cm (25-1/4") × 8.9cm (3-5/8") (W × H × D)	
Mass		36.0kg (79.2lbs)	
Type		Plasma display	
Compatible system	**VIDEO A,B**	NTSC3.58, NTSC4.43, PAL, SECAM	-
	COMPONENT	480i, 576i, 480p, 720p, 1035i, 1080i	
	RGB	15～56kHz(Horizontal),50～75Hz(Vertical)	
Power requirements		120V / 230VAC,50/60Hz	
Power Consumption		3.5A / 120V ,1.9A/230V (10W in stand by mode)	
Effective screen dimensions		Horizontal 92.1cm × Vertical 51.8cm × Diagonal 105.7cm	
Nmber of pixele		Horizontal 853 × Vertical 480	
Pixel pitch		Horizontal 1.08mm × Vertical 1.08mm	
Cell pitch		Horizontal 0.36mm × Vertical 1.08mm	
Dispiay colours		16.77million colours (RGBeach 256 hues)	
Contrast ratio		More than 450:1	
Audio power output		INTERNAL : 2W+2W(TYP at impedance 8Ω) EXTERNAL : 3W+3W(TYP at impedance 6Ω)	
Built-in speakers		2pcs., 4 × 7cm oval, impedance of 8Ω	
Environment		Temperature : 0～40℃ Relative humidity : 20～80% (non-condensing) Pressure : 700～1114hPa	
Storage		Temperature : -20～60℃ Relative humidity : 10～85%(non-condensing) Pressure : 300～1114hPa	
INPUT /OUTPUT TERMINALS	**VIDEO A**	· Video input : BNCterminal × 1、 1V(p-p)/75Ω · Video output : BNCterminal × 1、 1V(p-p)/75Ω · Audio input : Pin jack terminal × 2(L/R)、 500mVrms/22kΩ or over	-
	VIDEO B	· Y/Cinput : Y/Cterminal × 1 Y : 1V(p-p)/75Ω C : 0.286V(p-p)/75Ω (NTSC) C : 0.3V(p-p)Ω (PAL/SECAM) · Video input : Pin jack terminal × 1,1V(p-p)/75Ω · Audio input : Pin jack terminal × 2(L/R), 500mVrms/22kΩ or over	-
	COMPONENT	BNC terminal × 3 Y : 1V(p-p)/75Ω PB/B-Y : 0.7V(p-p)/75Ω PR/R-Y : 0.7V(p-p)/75Ω · Audio input : Pin jack terminal × 2(L/R)、 500mVrms/22kΩ or over	-
	RGB A	· D-sub3line15-pin terminal × 1 : Video signal : 0.7V(p-p)/75Ω : Sync signal : TTL level or0.3V(p-p)/75Ω	
	RGB B	BNC terminal × 5 (Bridge connection possible,auto termination) Analog RGB R : 0.7V(p-p)/75Ω G : 0.7V(p-p)/75Ω B : 0.7V(p-p)/75Ω Horizontal sync(HD) HD : 1.0V(p-p)/75Ω Composite sync(Cs) Cs : 1.0V(p-p)/75Ω Vertical sync(VD) VD : 0.7V(p-p)/75Ω	
	AUDIO INPUT	· Audio input : Pin jack terminal × 2(L/R)、 500mVrms/22kΩ or over (for RGB A or RGB B)	
	REMOTE 1	· RS-232C input : D-sub9-pin terminal × 1	
	REMOTE 2	· JVC CODE input : Stereo mini plug × 1 · JVC CODE output : Stereo mini plug × 1	
	SPEAKER OUT	Impedance 6Ω～16Ω	
	AUDIO OUT	Pin jack terminal × 2(L/R)、 Output impedance 600Ω	
Accessories		Remote control unit × 1(RM-C575) , AA/R6-size dry cell battery × 2(for operation check) Remote control cable × 1 , Power cord (approx 2.5m) × 3	

Design and specification are subject to change without notice.

■ Pin assignment (Specifications for terminals)SPECIFICATIONS

PC Input terminal

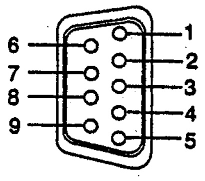
This terminal is connected to the moniter (Analogue RGB) out put terminal of a PC



Pin No	Signal name	Pin No	Signal name
1	Red	9	N/C
2	Green	10	GND
3	Blue	11	GND
4	N/C	12	N/C
5	GND	13	H.SYNC
6	GND	14	V.SYNC
7	GND	15	N/C
8	GND	External	GND

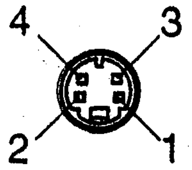
RS 232C terminal

This terminal is connected to the RS-232C terminal of a PC.



Pin No	Signal name
1	DCD (Data Carrier Detect)
2	RD (Receive Data)
3	TD (Transmit Data)
4	DTR (Data Terminal Ready)
5	GND (Ground)
6	DSR (Data Set Ready)
7	RTS (Request To Send)
8	CTS (Clear To Send)
9	RI (Ring Indication)

Y/C Input terminal (GD-V4210PZW / GD-V4210PZW-G)



Pin No	Signal name
1	GND (Y)
2	GND (C)
3	Y
4	C

- **Component Video mode** (GD-V4210PZW / GD-V4210PZW-G)

Divide	Item	Input picture format							
		Standard	Frequency			Total pixel		Visible area pixel	
			Vert.	Hori.	Dot clock	Hori.	Vert.	Hori.	Vert.
			fVi	fHi	fci	Hi	Vi	Hai	Vai
			Hz	kHz	MHz	pixel/line	line/frame	pixel/line	line/frame
COMPONENT	480i	ITU-R BT601-4 (CCIR Rec.601)	59.94	15.734	13.50	858	525	720	485
	576i	ITU-R BT601-4 (CCIR Rec.601)	50.00	15.625	13.50	864	625	720	575
	480p	SMPTE 293M	59.94	31.468	27.00	858	525	720	483
	720p	SMPTE 296M	60.00	45.000	74.25	1650	750	1280	720
	1080i	SMPTE 274M	60.00	33.750	74.25	2200	562.5	1920	540
	1035i	BTA S-001A	60.00	33.750	74.25	2200	562.5	1920	517.5

PDP (PLASMA DISPLAY PANEL) DESCRIPTION

- Although a PDP is made with highly advanced precision, this does not necessarily mean all of the cells operate correctly. The PDP inevitably includes cell that do not light or light constantly.

  If the specifications (PDP performance) are unclear at the time of shipment, an adequate description cannot be conveyed to the customer.

  In event of inquiries from customers regarding PDP performance, check the following specifications in order to offer a suitable reply.

- **Cell arrangement**

  The PDP is constructed of front and rear glass substrates provided with respective discharge electrodes. Between these, neon for discharging and xenon for generating ultraviolet rays are enclosed.

  One picture element (pixel) is composed of Red, Green and Blue (RGB) cells. The cell pitch is 0.36 mm horizontal (1.08 mm per pixel) by 1.08mm vertical.

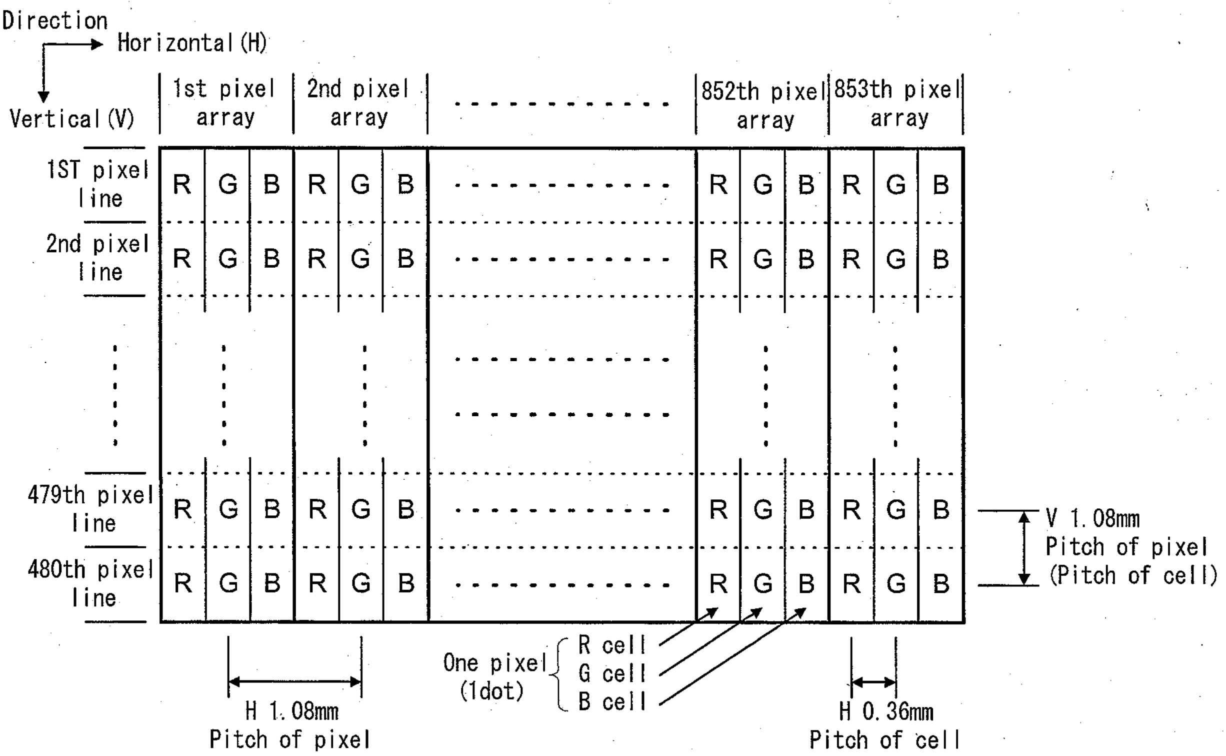

Direction
Horizontal (H)
Vertical (V)
1st pixel array
2nd pixel array
852th pixel array
853th pixel array
1ST pixel line
2nd pixel line
479th pixel line
480th pixel line
R
G
B
V 1.08mm
Pitch of pixel
(Pitch of cell)
One pixel (1dot)
R cell
G cell
B cell
H 1.08mm
Pitch of pixel
H 0.36mm
Pitch of cell

Fig. 1

As shown in Fig. 1, the cells are arranged for each R／G／B color. A pixel consists of each cell of R/G/B/ color. The size of a cell is 0.36mm horizontally and 1.08mm vertically.

- Pixel fault

  There are two pixel faults - bright fault and dark fault - that are respectively defined as follows.

(1) Bright fault

In this pixel fault, a cell that should not light originally is lighting or flashing on and off.

For checking this pixel fault, input ALL BLACK SCREEN and find out the cell that is lighting or flashing on and off.

(2) Dark fault

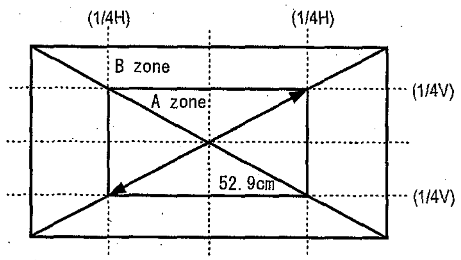
In this pixel fault, a cell that should light originally is not lighting or not flashing on and off or lighting with the brightness twice as brighter as originally lighting.

For checking this pixel fault, input 100% of each RGB color and find out the cell that is not lighting or not flashing on and off or lighting with the brightness as brighter as originally lighting.

(3) Pixel fault

	Screen display	Criteria for number of faulted cell	Criteria for number of consecutive faulted cell
Bright fault	All black screen	A zone: 1 or less than 1 in each color B zone: 2 or less than 2 in each color	2 or Less than 2 consecutively
Dark fault	Red level 100% on entire screen	A zone: 2 or less than 2 in each color B zone: 6 or less than 6 in each color	2 or Less than 2 consecutively
	Green level 100% on entire screen		
	Blue level 100% on entire screen		

(Note) A-zone: Center portion (area enclosed by 1/4 vertically from the top and bottom and 1/4 horizontally from the right and left sides.)
B-zone: Other area



(Note) The consecutive pixel fault that are diagonically or intensively generated shall be interpreted as follows:

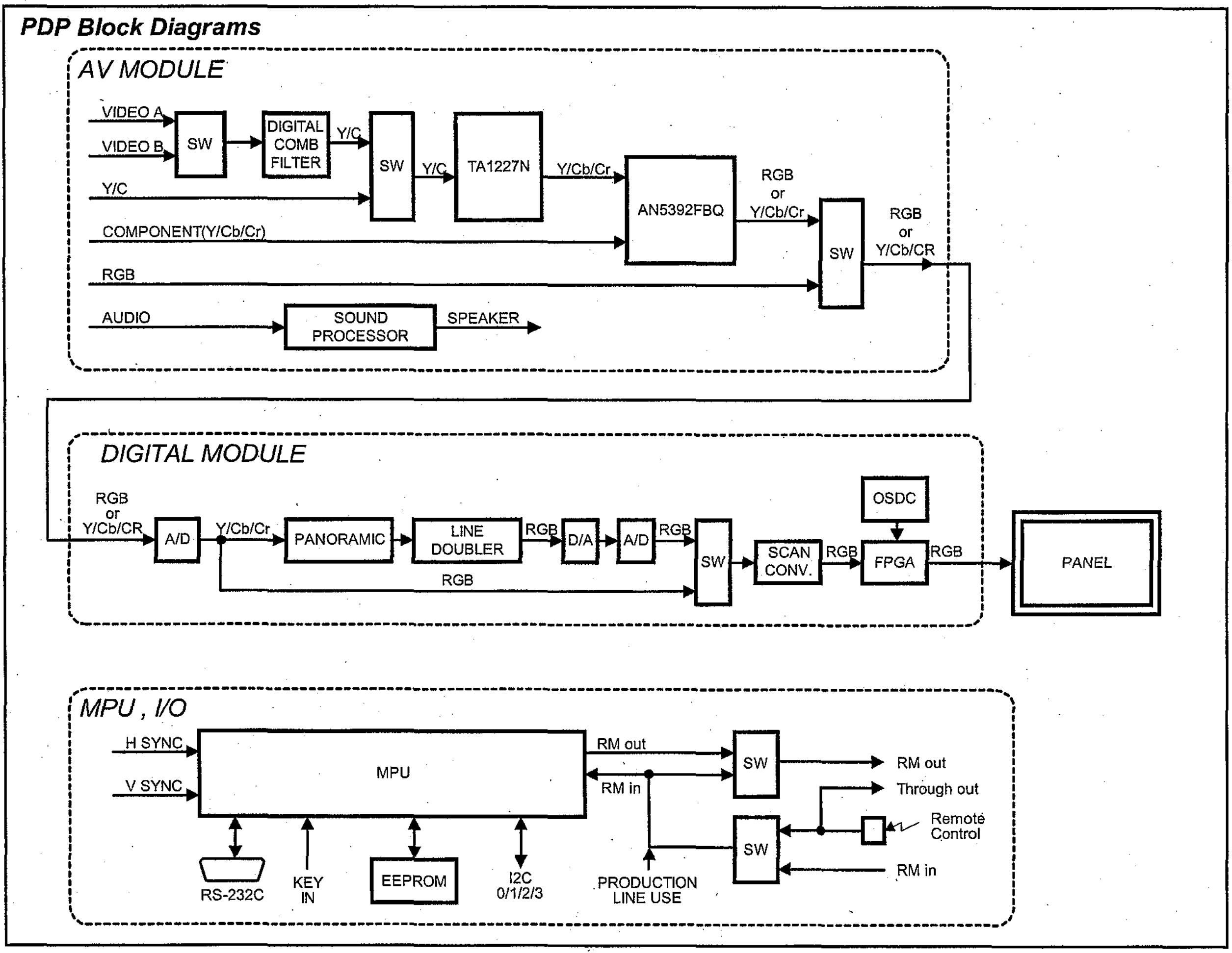
●○○
○●○
○○● → consecutive 3

●○
●● → consecutive 3

●●
●● → consecutive 4

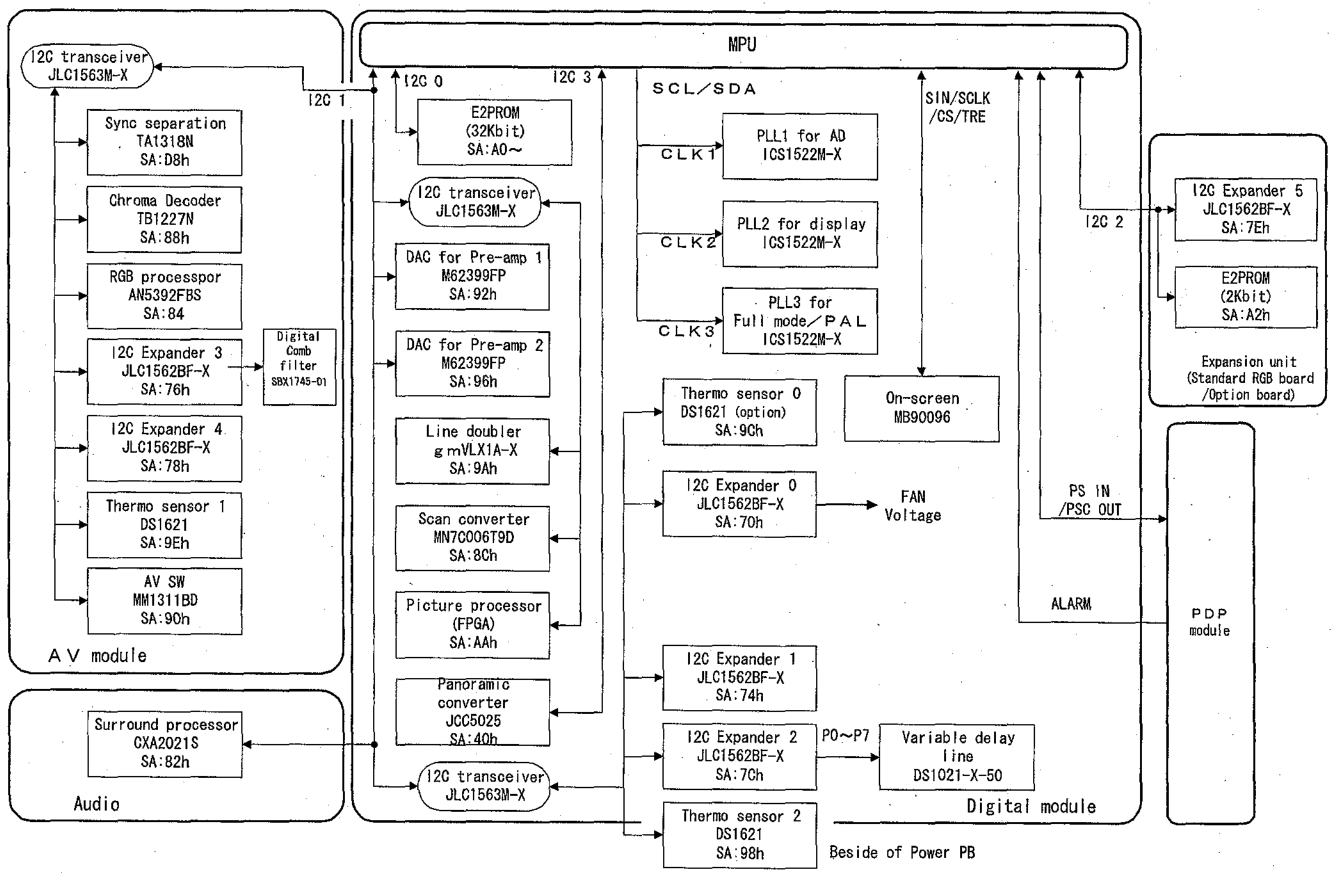
Structure around M-com

SYSTEM BLOCK DIAGRAM


PDP Block Diagrams
AV MODULE
VIDEO A
VIDEO B
SW
DIGITAL COMB FILTER
Y/C
SW
Y/C
TA1227N
Y/Cb/Cr
Y/C
COMPONENT(Y/Cb/Cr)
AN5392FBQ
RGB or Y/Cb/Cr
SW
RGB or Y/Cb/CR
RGB
AUDIO
SOUND PROCESSOR
SPEAKER
DIGITAL MODULE
RGB or Y/Cb/CR
A/D
Y/Cb/Cr
PANORAMIC
LINE DOUBLER
RGB
D/A
A/D
RGB
RGB
SW
SCAN CONV.
RGB
OSDC
FPGA
RGB
PANEL
MPU , I/O
H SYNC
V SYNC
MPU
RM out
RM in
SW
RM out
Through out
Remote Control
SW
RM in
RS-232C
KEY IN
EEPROM
I2C 0/1/2/3
PRODUCTION LINE USE

Structure around M-com

Structure around MPU


I2C transceiver JLC1563M-X
Sync separation TA1318N SA:D8h
Chroma Decoder TB1227N SA:88h
RGB processpor AN5392FBS SA:84
I2C Expander 3 JLC1562BF-X SA:76h
Digital Comb filter SBX1745-01
I2C Expander 4 JLC1562BF-X SA:78h
Thermo sensor 1 DS1621 SA:9Eh
AV SW MM1311BD SA:90h
AV module
Surround processor CXA2021S SA:82h
Audio
I2C 1
MPU
I2C 0
I2C 3
E2PROM (32Kbit) SA:A0～
I2C transceiver JLC1563M-X
DAC for Pre-amp 1 M62399FP SA:92h
DAC for Pre-amp 2 M62399FP SA:96h
Line doubler g mVLX1A-X SA:9Ah
Scan converter MN7C006T9D SA:8Ch
Picture processor (FPGA) SA:AAh
Panoramic converter JCC5025 SA:40h
I2C transceiver JLC1563M-X
SCL／SDA
CLK1
PLL1 for AD ICS1522M-X
CLK2
PLL2 for display ICS1522M-X
CLK3
PLL3 for Full mode／PAL ICS1522M-X
SIN/SCLK /CS/TRE
On-screen MB90096
Thermo sensor 0 DS1621 (option) SA:9Ch
I2C Expander 0 JLC1562BF-X SA:70h
FAN Voltage
I2C Expander 1 JLC1562BF-X SA:74h
I2C Expander 2 JLC1562BF-X SA:7Ch
P0～P7
Variable delay line DS1021-X-50
Thermo sensor 2 DS1621 SA:98h
Beside of Power PB
Digital module
I2C 2
I2C Expander 5 JLC1562BF-X SA:7Eh
E2PROM (2Kbit) SA:A2h
Expansion unit (Standard RGB board /Option board)
PS IN /PSC OUT
ALARM
PDP module

Self check

- Self check LEDs are located on the upper-left side of the set. LEDs are not screen from outside when they are turned off.
- There is no light out LED when detected abnormal condition. All 3 LEDs are lighting or flashing.

Detected items	LED			Priority
	upper	center	lower	
E2PROM communication error	○	☆	☆	6
Panel alarm	☆	○	○	5
High temperature	☆	○	☆	4
Fan stop	☆	☆	○	3
Flash write abnormality	☆	☆	☆	2
No mounting (input) board	○	○	☆	1

Note:
- displayed color: green
- flashing interval: 0.25s ON, 0.25s OFF
- LEDs indicate just 1 detected item that has priority even detected more than 2 items to avoid any confusion.
- All LEDs are lighting when Flash memory writing.

☆: Flashing LED / ○: Lighting LED

No mounting (input) board error : When both Terminal board (AV input) and RGB board do not mount in the unit, this error will occur.
At least, one of them is mounted in the unit, it will be OK.

For checking the diagnosis history, enter the service mode then chose the “DIAGNOSIS BLOCK”.

PRECAUTIONS FOR USE

1. Safety precaution for PDP operation

(1) Do not prevent the radiation of heat from back, top and flank sides of a PDP. (Refer to "5. Requirements for setting".)
Preventing the radiation of heat from each side causes high temperature within a PDP and may damage the inner circuit.

(2) Install a PDP in a place where is well ventilated.
Ambient temperature should be within a range of **0～40° C**.

(3) Actions when the picture disappeared on the screen
When the temperature inside of a PDP became high due to stoppage of the inside fan, the detection circuit for suspension of fan operation starts to function and turns the power OFF automatically. In this case, unplug the power code immediately.
∗ Refer to "Self check" portion for detail.

(4) Install in not dusty place. If dust covers the air intake holes, inside ventilation effect will reduce. Then, it may damage the inner circuit.
If the unit uses in such atmosphere, it will strongly require regular cleaning or maintenance.

2. Retained-Image and burning

When the same pattern is displayed continuously for many hours, the burning of the screen is occurred in the same manner as for a CRT. This will shorten the service life of a PDP. In order to avoid the burning of the screen, turn the display off when not necessary. Also take such other measures as scrolling the screen and using a screen saver. In addition, periodically display the brightness reversal, the reversal to the complementary color or the insertion of animated image - all these will make the display on the screen uniform. Since the higher brightness may cause the burning, users are requested to use neutral colors as much as possible. Animated image will not cause the burning.

When the screen is switched after continuous display, the retained-image may be significant because the brightness of a certain portion becomes higher than that of other portions. This is caused by a phenomenon in which a surface electrical discharge of the lighted portion is more activated than the non-lighted portions, resulting in higher brightness.

This unit has functions such as "PIXEL SHIFT", "COLOR-REVERSE" and "REFRESH". They will reduce burning. Please refer to the instruction book for detail.

3. Infrared rays

Because the near infrared rays (800～1000mm) radiate from the panel face, the neighboring infrared ray remote controllers, infrared communication systems, etc. may malfunction. In these cases, take a measure to prevent the trouble to be caused by direct rays (or reflected rays) from the screen by changing the direction of the screen face or keeping a safe distance between a PDP and other devices.

4. Matters that require attention when placing a plasma display upright

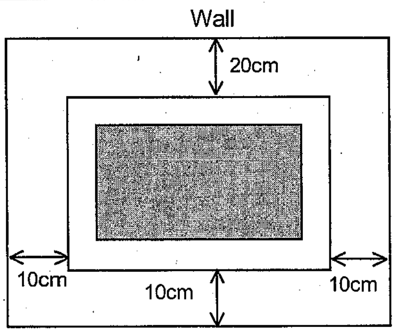
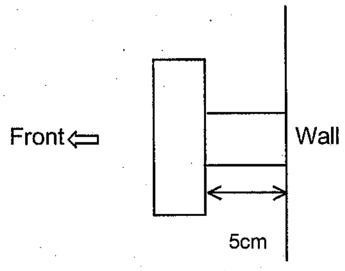
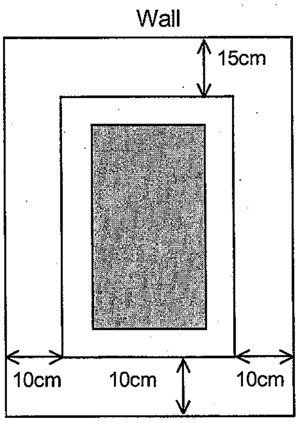
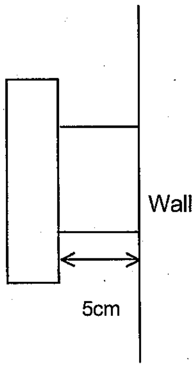
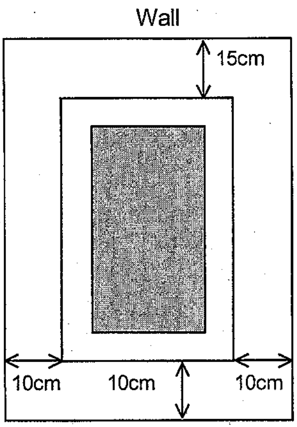
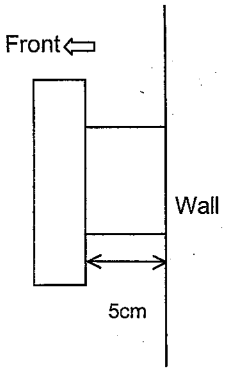
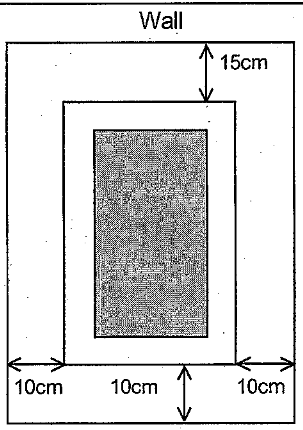
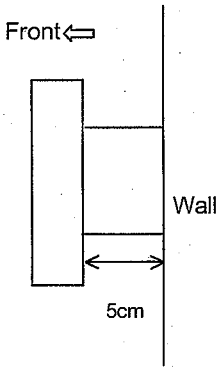
When a plasma display panel is placed upright, it is necessary to make the following setting.

- **[Setting procedure]**

(1) Enter to SETUP MODE.
(2) Select "VENTILATION MODE".
(3) Change the value from "H" to "V".

5. Requirements for setting

The following minimum space must be kept when a PDP is installed. (The recommended distance should be from the most projected portion when a PDP is inclined.)

Methods of Installation	Front	Flank	Remarks
① **Hanging from a wall [Horigontil]**	 Wall 20cm 10cm 10cm 10cm	 Front⇦ Wall 5cm	· An exclusive fixture (option) should be used. · The structure and strength of the wall where a PDP is installed should be checked beforehand so as to install the PDP safely without any accident. · It is necessary to set the fan rotation when install "Vertically". Refer to Precautions for use section 4.
② **Hanging from a wall [Vertical]**	 Wall 15cm 10cm 10cm 10cm		
③ **Suspension from a ceiling**	 Wall 15cm 10cm 10cm 10cm	 Front⇦ Wall 5cm	
④ **Disktop**	 Wall 15cm 10cm 10cm 10cm	 Front⇦ Wall 5cm	· A PDP should be installed on a rigid floor or stand. · In order to prevent a PDP from turning over by an accident or earthquake, safety measures should be considered.

6. Optical filter (Front filter)

(1) Don't expose the optical filter directly to the sun for a long period of time.

Exposing directly to the sun for a long period of time may change the special property of the optical filter, resulting in a change of color.

(2) Don't wipe the optical filter with solvents such as benzene, thinner, etc.

Wiping the optical filter with solvents such as benzene, thinner, etc. may cause change in quality and peel off the coasting on the surface.

Lightly wipe the optical filter with a soft cloth with less fluffy (e.g. pure flannel).

Because the surface of the optical filter is fragile, don't scrub or hit it with a hard material.

7. Other precautions

(1) Brightness change in the screen

In order to save the power consumption, the power is controlled (with APS function) depending on the brightness of the screen. For this, the brightness may change after a short time when the picture of the screen is changed. However, this phenomenon is not a trouble.

(2) Component input setting

The component signals 1080i and 1035i are the same frequencies. So, the unit does not detect the signals automatically.

In this case, set required signal by "HD SIGNAL MODE" in the setup menu.

■Precaution during transportation

- When a PDP set is delivered, the PDP body inside of the box will be subject to constant of gravitation under the rough handling (throwing, dropping, etc.) even though a rigid box is used.
  In such a case, the PDP may be damaged during transportation. In order to avoid an accident during transportation, care must be taken to select a reliable carrier. Once a reliable carrier is selected, advise them how to handle a PDP properly during transportation. In addition, a PDP should be insured for its physical damage before shipment.
  This product is fragile because glass is widely used. Thus the following requirements for transportation should be observed.

(1) Don't apply vibration and impact.
The glass of a PDP may be broken when the package is brought down on its side. When carrying the package, it must always be handled with two persons with due care not to apply vibration and impact on the package.

(2) Don't lay a PDP on its side.
A PDP should always be placed upright during both transportation and safekeeping. Don't lay it on its side. The panel of a PDP is very fragile to the impact in the horizontal direction.
When a car carries a PDP, load it on board the car in parallel with the moving direction of the car. Don't lay several PDPs one on top another.
During safekeeping, don't lay more than two PDPs one on top another even if they are kept upright.

■Precaution during changing of armor parts (rear cover, front panel and optical (front) filter)

- Extreme care must be exercised for a PDP when the armor parts are changed. To drop a PDP is out of question. Special attention should be paid not to apply pressure on the glass surface during the work. Don't touch the panel surface in any way.
  When changing the armor parts (rear cover, front panel and optical (front) filter), place the panel (PDP side) upside down in principle. At this time, a suitable mat must be used so as to prevent the front side from damaging. However, excessively soft material (e.g. blanket) should not be used for this purpose in any way. If a blanket is used, the surface of a PDP is pressurized by the blanket when placing the panel upside down. Under such a condition, the PDP may be broken during the work.

SPECIFIC SERVICE INSTRUCTIONS

DISASSEMBLY PROCEDURE

Removing the Rear Cover

1. Remove screws marked **(a)** as shown in Fig. 1 at 24 locations.

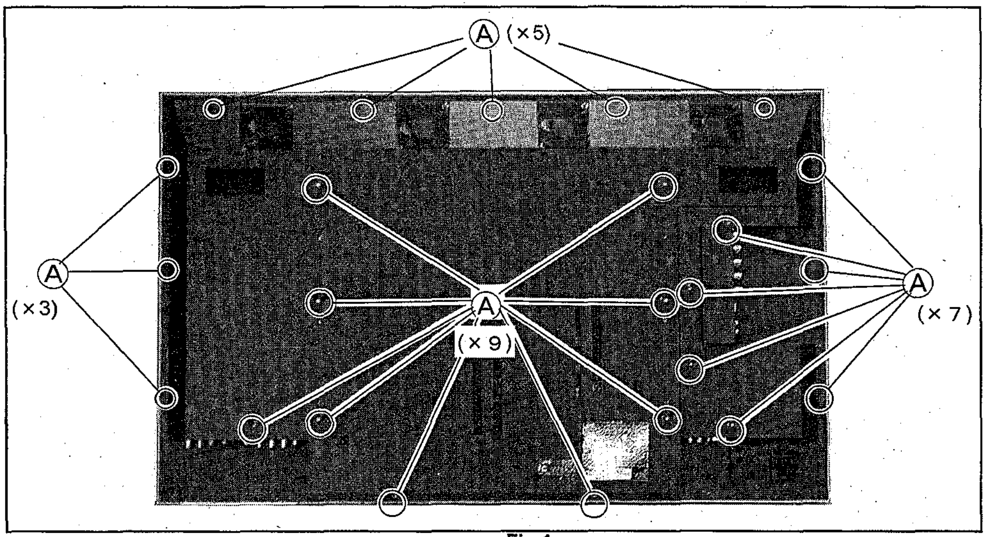


Fig.1

2. Remove screws marked **(B)** as shown in Fig. 2 at 6 locations.
3. Remove screws marked **(C)** as shown in Fig. 2 at 2 locations.
4. Remove the connector cover.
5. Remove the rear cover.

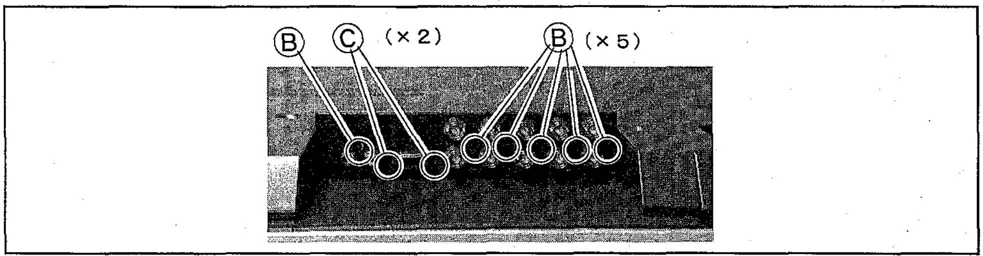


Fig.2

Removing the Input PB cover

1. Remove the connector cover and the rear cover.
2. Remove screws marked **(D)** as shown in Fig. 3 at 5 locations.
3. Remove screws marked **(E)** as shown in Fig. 3 at 3 locations.
4. Remove connectors marked (A),(B)and(C) as shown in Fig. 3.
5. Remove Input PB cover.
6. Remove screws marked **(F)** as shown in Fig. 3 at 2 locations.

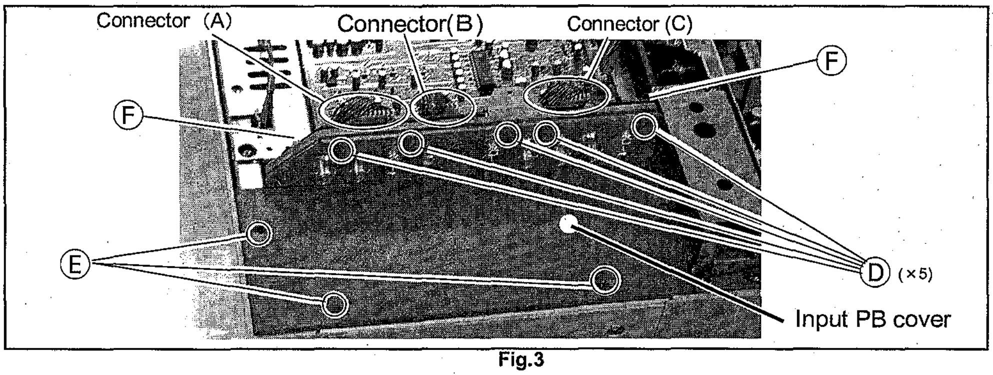


Fig.3

Removing the Circuit Layer Flame

* After removing the rear cover and the connector cover.

1. Remove screws marked **(G)** as shown in Fig. 4 at 12 locations.
2. Remove screws marked **(H)** as shown in Fig. 4 at 8 locations.
3. Remove screws marked **(I)** as shown in Fig. 4 at 1 locations.
4. Disconnect the 4 connectors. (CN102, CN103, CN201, X) & Disconnect the joint as shown in Fig. 4.

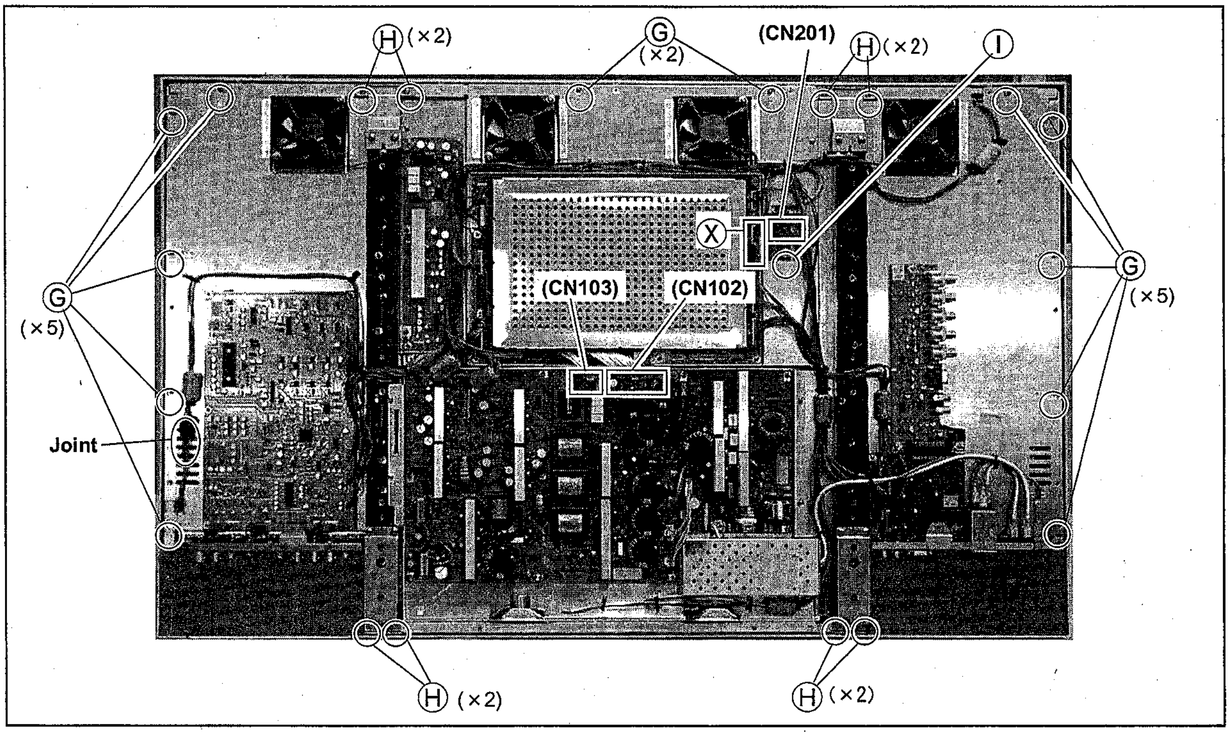


Fig.4

5. Remove screws marked **(J)** as shown in Fig. 5 at 10 locations.

   * Do not remove other screws.

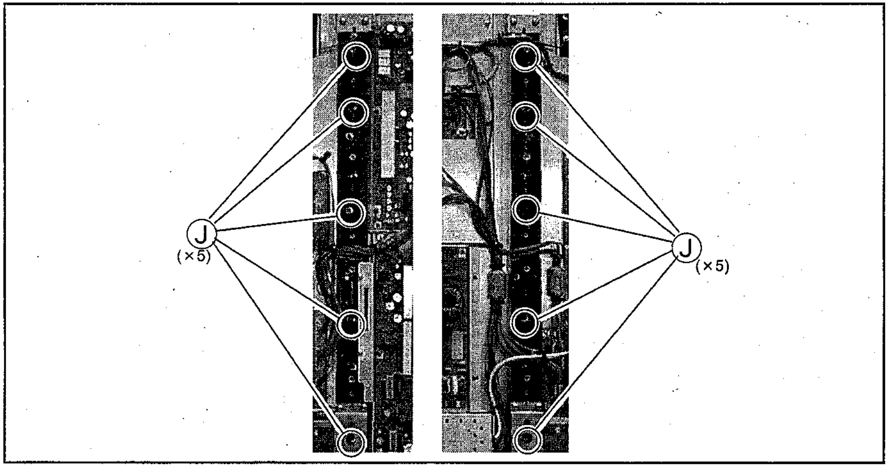


Fig.5

6. Disconnect the 2 cables (Cable 1, & Cable 2) as shown in Fig. 6.

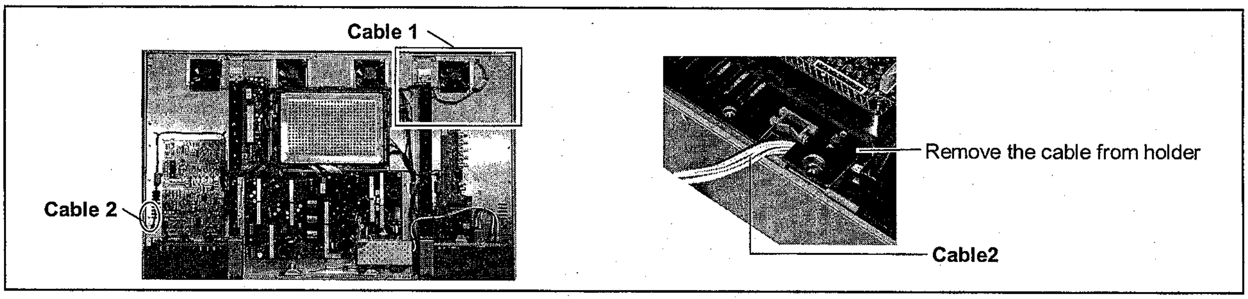

Cable 1
Cable 2
Remove the cable from holder
Cable2

Fig.6

7. Raising the circuit layer flame.

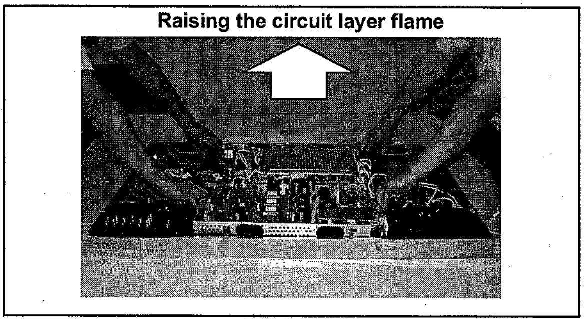

Raising the circuit layer flame

Fig.6

Removing the Plasma Display Panel

1. Remove screws marked **(K)** as shown in Fig. 7 at 4 locations.
2. Remove the Plasma Display Panel.

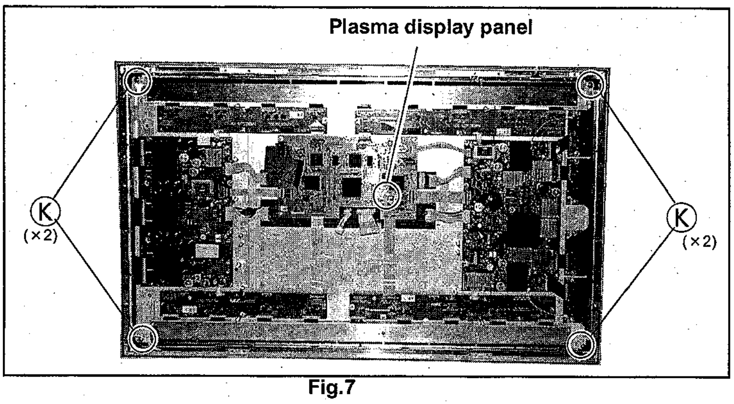

Plasma display panel
K
(×2)
K
(×2)

Fig.7

Removing the Front Panel and Optical Filter

∗ It is not necessary removing the Rear cover.

1. Remove screws marked **(L)** as shown in Fig.8 at 3 locations.
2. Remove the Front Panel.

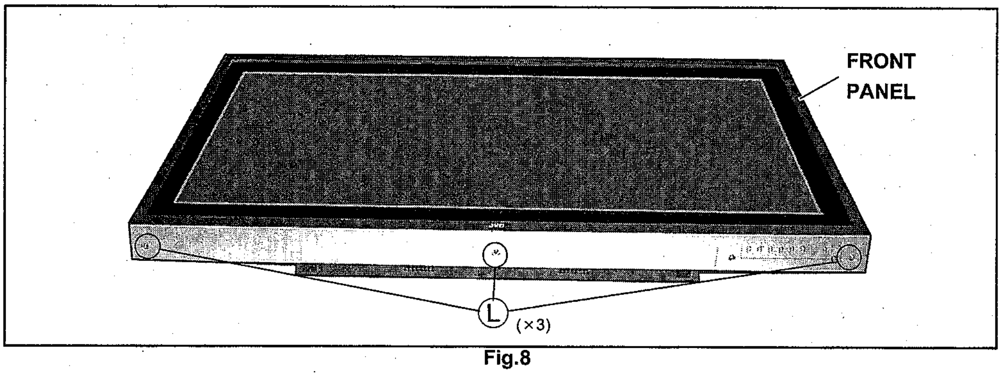

FRONT PANEL
L
(×3)

Fig.8

Removing the Optical Filter

3. Remove screws marked **(M)** as shown in Fig.7 at 10 locations.
4. Remove the Holders at 10 location.
5. Remove the Optical Filter.

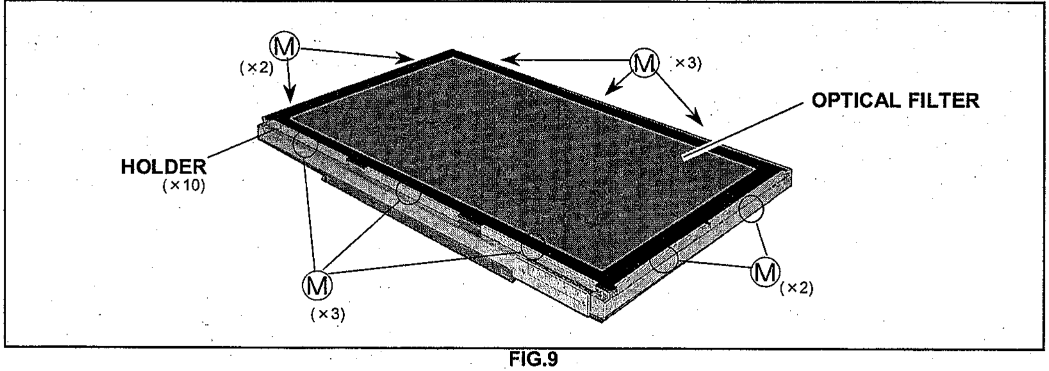

M
(×2)
M
×3)
OPTICAL FILTER
HOLDER
(×10)
M
(×3)
M
(×2)

FIG.9

Removing the Main Components

- **Removing the Fan Motors**

* After removing the rear cover.

1. Remove screws marked **(N)** at 2 locations.
2. Remove the connector.
3. Remove the fan motors

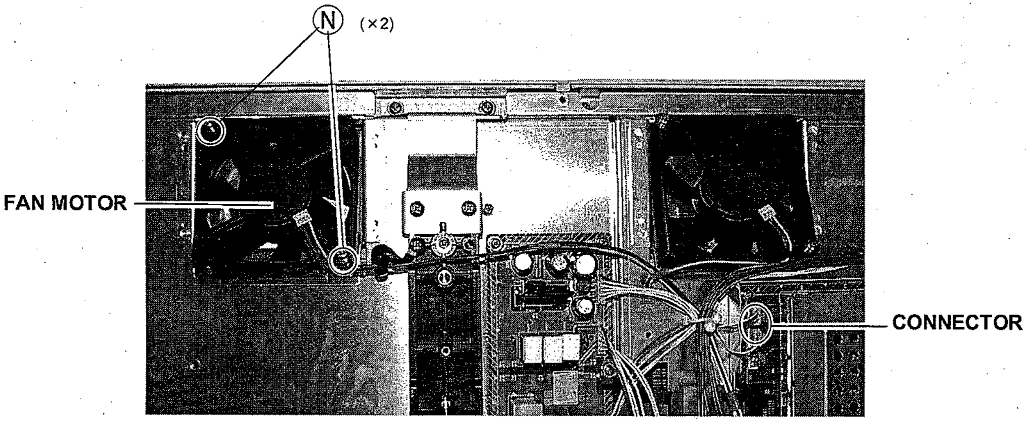

N
(×2)
FAN MOTOR
CONNECTOR

Fig.10

■ Removing the speaker

* After removing the rear cover.

1. Remove screws marked **(O)** as shown in Fig.11 at 4 locations.
2. Slightly raise the power circuit block.
3. Remove screw marked **(P)** as shown in Fig.12 at 2 locations.
4. Remove the speakers.

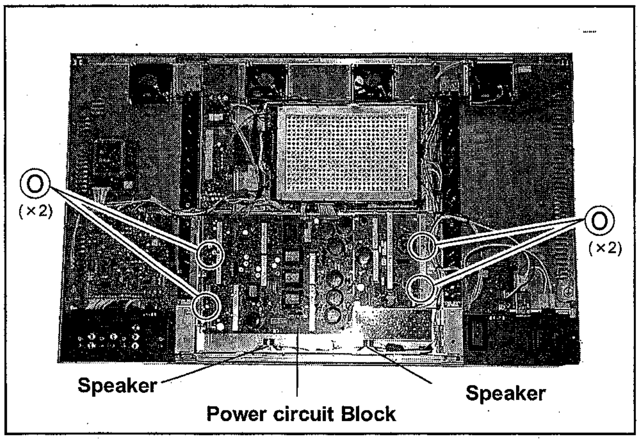

O
(×2)
O
(×2)
Speaker
Speaker
Power circuit Block

Fig.11

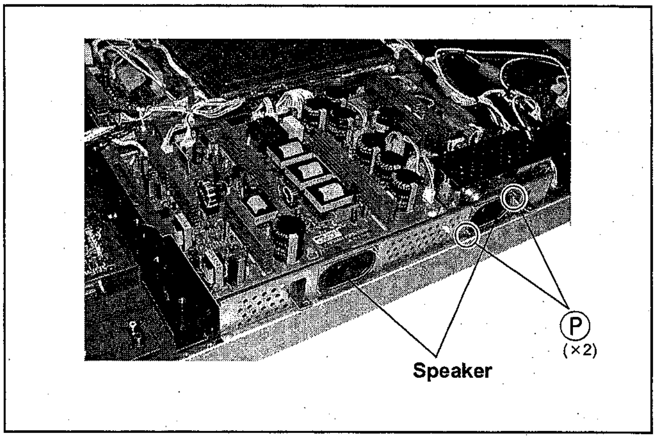


Fig.12

■ Removing the Speaker Terminal Board.

* After removing the rear cover and the connector cover.

5. Remove screws marked **(Q)** as shown in Fig.13 at 3 locations.
6. Remove screws marked **(R)** as shown in Fig.13 at 4 locations.
7. Remove screws marked **(S)** and **(T)** as shown in Fig.13 at 3 locations.
8. Remove screws marked **(U)** as shown in Fig.13 at 3 locations.
9. Remove the speaker terminal board.

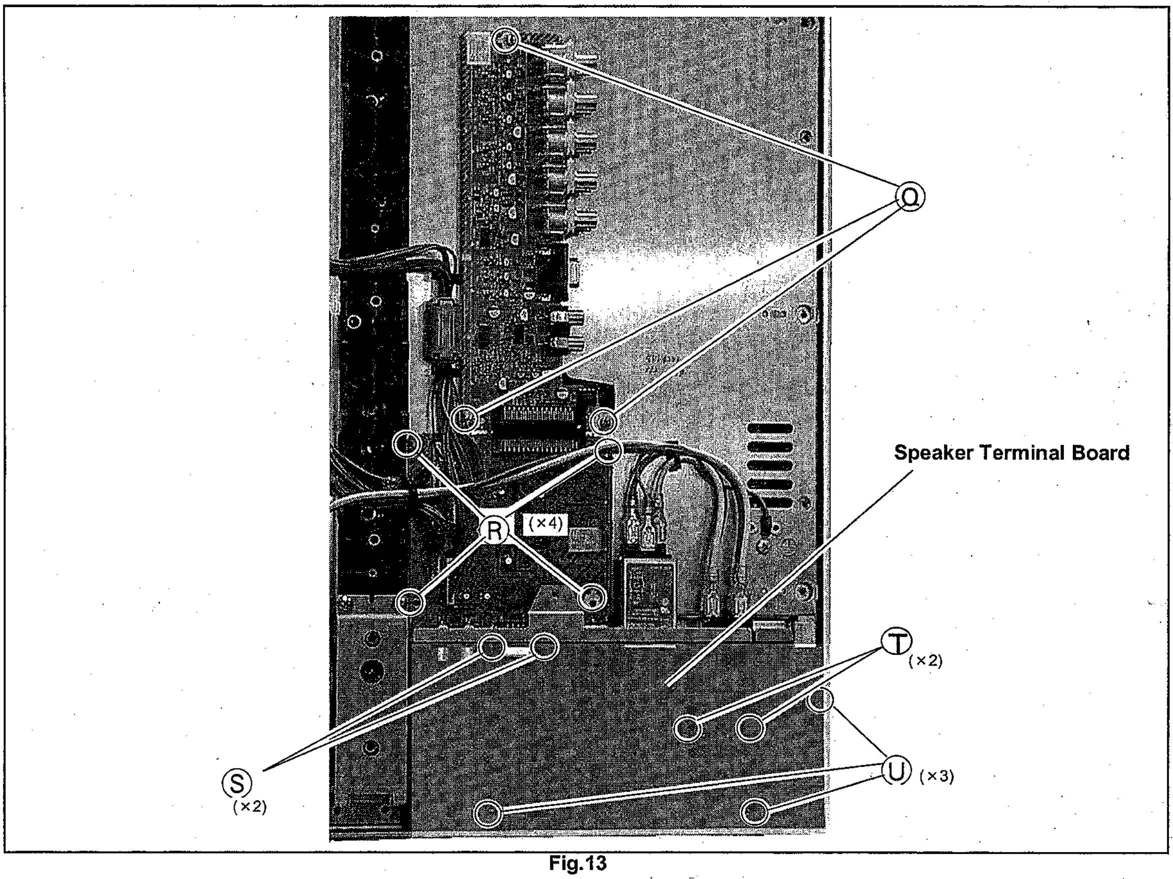

Q
R
(×4)
Speaker Terminal Board
T
(×2)
U
(×3)
S
(×2)

Fig.13

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

SERVICE ADJUSTMENTS

PRIOR TO STARTING ADJUSTMENT

1. Confirm the proper AC power voltage is being supplied.
2. Supply power to the set and measuring instruments and allow to warm up for at least 30 minutes.
3. Use care not disturb controls and switches not mentioned in the adjustments items.
4. Refer to adjustments setting and set user operated controls (BRIGHT, CONTRAST, PHASE, TINT, etc.) to the indicated positions.

How to enter the SERVICE MENU

The steps how to enter the SERVICE MENU are shown below. The steps are common to the TV set and remote controller.

(1) Press 「MENU」 KEY and 「 ↑ 」 KEY simultaneously.
The symbol ⚠ will be displayed on the screen center.

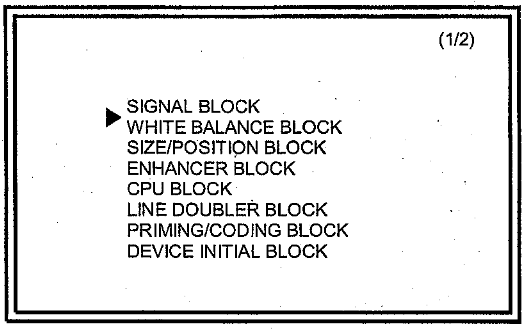
(2) While ⚠ is on the screen, press 「MENU」 KEY and 「VOL－」 KEY simultaneously.
The words <Please don't touch!> will be displayed on the screen center.

(3) While the words of <Please don't touch!> are on display, press 「 → 」 KEY
The SERVICE MENU will be displayed.

The first letters of the SERVICE MENU correspond to the following blocks, respectively.

S ························ SIGNAL BLOCK
W ······················· WHITE BALANCE BLOCK
D ························ SIZE/POSITION BLOCK
E ························ ENHANCER BLOCK
C ························ CPU BLOCK

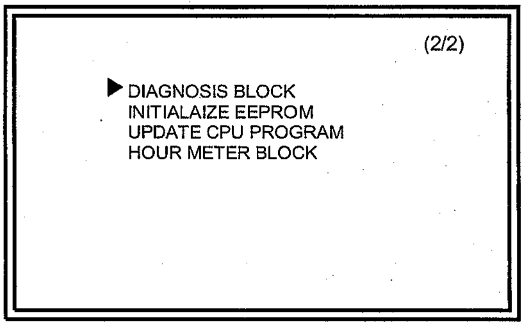
SERVICE MENU (1/2)



(1/2)

▶ SIGNAL BLOCK
WHITE BALANCE BLOCK
SIZE/POSITION BLOCK
ENHANCER BLOCK
CPU BLOCK
LINE DOUBLER BLOCK
PRIMING/CODING BLOCK
DEVICE INITIAL BLOCK

SERVICE MENU (2/2)



(2/2)

▶ DIAGNOSIS BLOCK
INITIALAIZE EEPROM
UPDATE CPU PROGRAM
HOUR METER BLOCK

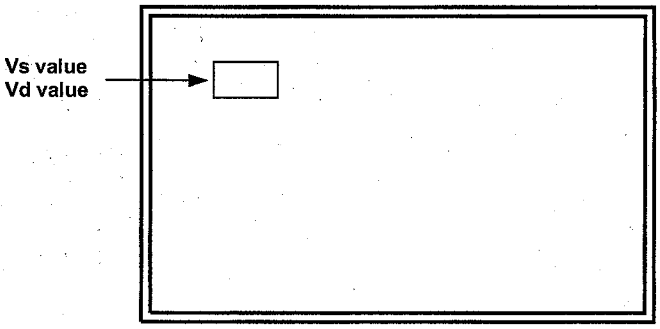
1 . Power voltage

Preparation before	Make sure that "NOSYNC" is displayed when the power is turned ON.
Adjustments	It is necessary to wait for more than 5 minutes.
Measuring instruments	Digital Voltage meter

1. Connect the probe of the digital voltage meter to the test point (175V、GND) of the power PB ass'y.
2. Read the Vs value behind the panel and adjust the VR551 so that the power voltage falls within the value. (Tolerance: ±1.0V of the displayed value)
3. Connect the probe of the digital voltage meter to the test point (75V、GND) of the power PB ass'y.
4. Read the Vd value behind the panel and adjust the VR351 so that the power voltage falls within the value. (Tolerance: ±1.0V of the displayed value)

∗ Instead of the test points, the following connectors for TP can also be used.

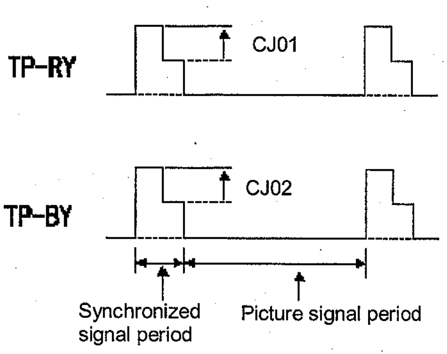
TP
1 , **Vd**
2 , **GND**
3 , **N. C.**
4 , **Vs**



2. SECAM offset (VIDEO input)

Measuring instruments	Oscilloscope / SECAM video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	Composite video signal 10 STEP pattern

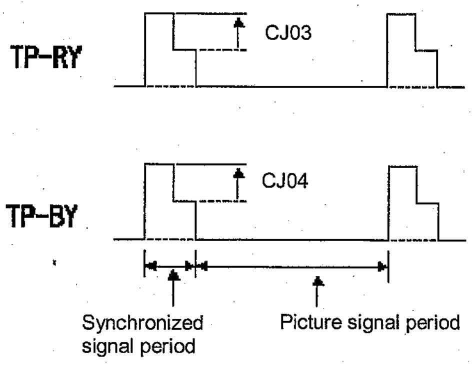
1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to the AV PCB TP-RY.
3. Adjust the <SERVICE MENU> signal block CJ01 so that the wave becomes no offset.
4. Connect the probe of the oscilloscope to the AV PCB TP-BY.
5. Adjust the <SERVICE MENU> signal block CJ02 so that the wave becomes no offset.


TP-RY
CJ01
TP-BY
CJ02
Synchronized signal period
Picture signal period

3. SECAM offset (Y/C input)

Measuring instruments	Oscilloscope / SECAM video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	Y/C video signal – 10 STEP pattern

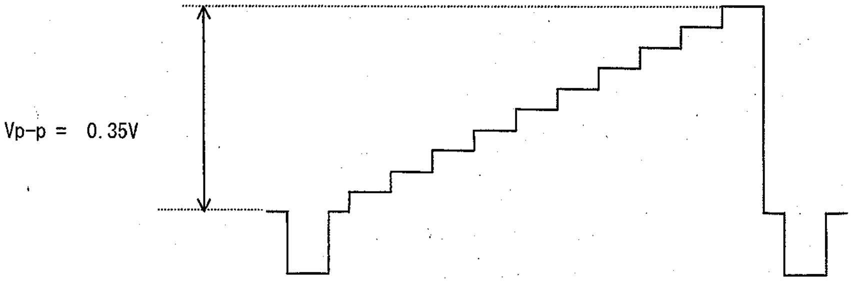
1. Input the signal to Y/C terminal of VIDEO B.
2. Connect the probe of the oscilloscope to the AV PCB TP-RY.
3. Adjust the <SERVICE MENU> signal block CJ03 so that the wave becomes no offset.
4. Connect the probe of the oscilloscope to the digital PCB TP-BY.
5. Adjust the <SERVICE MENU> signal block CJ04 so that the wave becomes no offset.


TP-RY
CJ03
TP-BY
CJ04
Synchronized signal period
Picture signal period

4. Sub-contrast (NTSC)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Preparation before Adjustments	
Adjustment Steps	Composite video signal 10 STEP pattern Chromatography signal should be turned OFF.

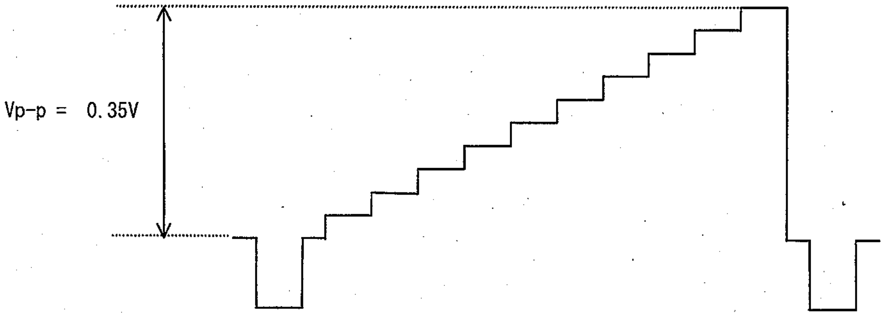
6. Input the signal to VIDEO A.
7. Connect the probe of the oscilloscope to the digital PCB TP-Y.
8. Adjust the <SERVICE MENU> signal block SA05 so that the amplitude between black signal portion and white 100 % portion becomes0.35V.



5. Sub-contrast (480i)

Measuring Instruments	Oscilloscope / Video signal generator
Preparation before Adjustments	
Signals to be used	480i video signal 10 STEP pattern

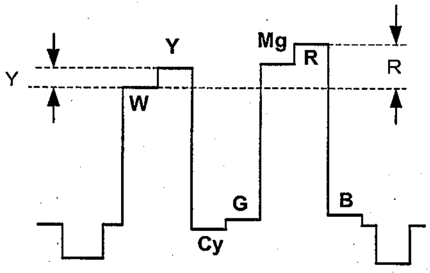
1. Input the Y signal to the Y terminal of COMPONENT.
2. Connect the probe of the oscilloscope to the digital PCB TP-Y.
3. Adjust the <SERVICE MENU> signal block SG05 so that the amplitude between black signal portion and white100 % portion becomes 0.35V.



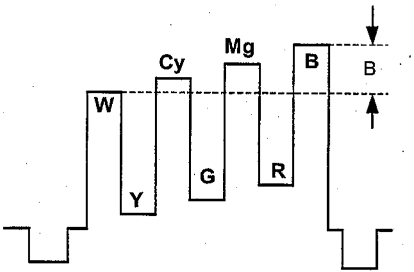
6. Chromatography phase (video input, NTSC)

Measuring instruments	Oscilloscope / NTSC video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	Composite video signal 75% color bar pattern

1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to AV PCB TP-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SA03(chromatography) and SA04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TP-AB.
5. Adjust the <SERVICE MENU> signal block SA07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



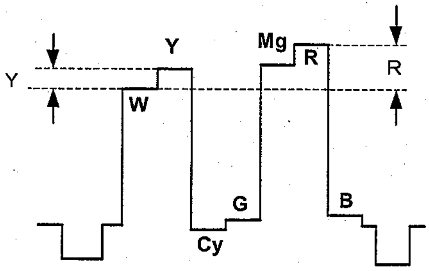
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

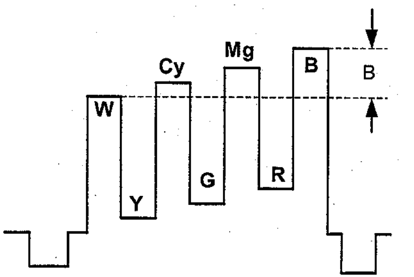
7. Chromatography phase (video input, PAL)

Measuring instruments	Oscilloscope / PAL video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	Composite video signal 75% color bar pattern

1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to AV PCB TP-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SB03(chromatography) and SB04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AVB PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SB07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



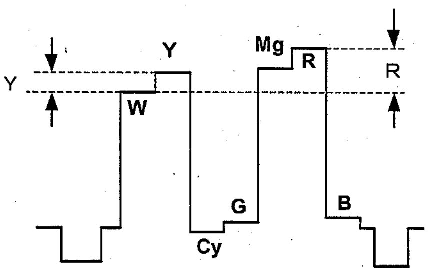
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

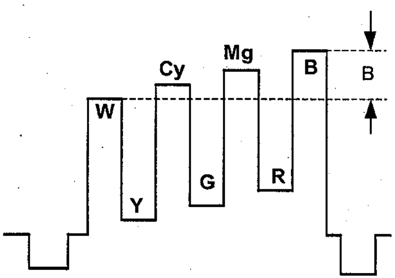
8. Chromatography phase (video input, SECAM)

Measuring instruments	Oscilloscope / SECAM video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	Composite video signal - 75% color bar pattern

1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SC03(chromatography) and SC04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV-PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SC07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



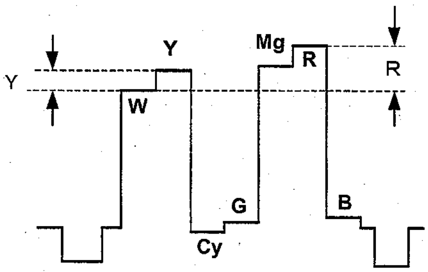
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

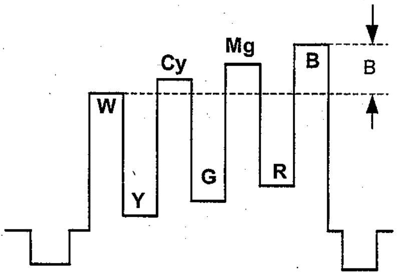
9. Chromatography phase (Y/C input, NTSC)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	YC video signal 75% color bar pattern

1. Input the signal to Y/C terminal of VIDEO A.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SD03(chromatography) and SD04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV-PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SD07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



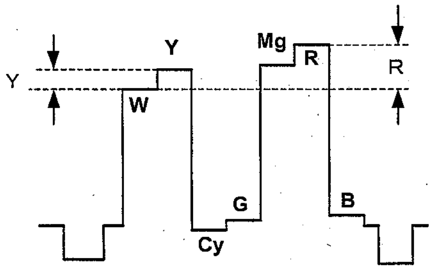
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

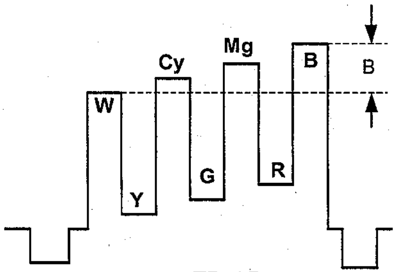
10. Chromatography phase (Y/C input, PAL)

Measuring instruments	Oscilloscope / PAL video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	YC video signal 75% color bar pattern

1. Input the signal to Y/C terminal of VIDEO A.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SE03(chromatography) and SE04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SE07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



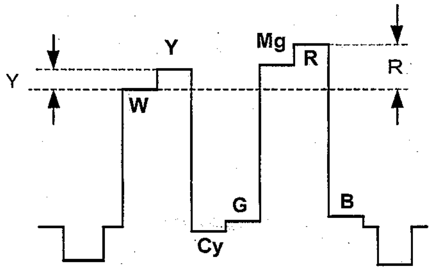
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

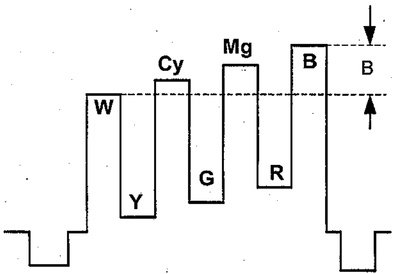
11. Chromatography phase (Y/C input, SECAM)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	YC video signal 5 % color bar pattern

1. Input the signal to Y/C terminal of VIDEP A.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SF03(chromatography) and SF04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SF07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



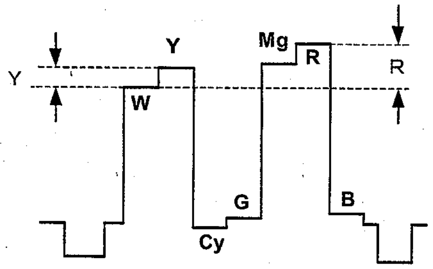
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

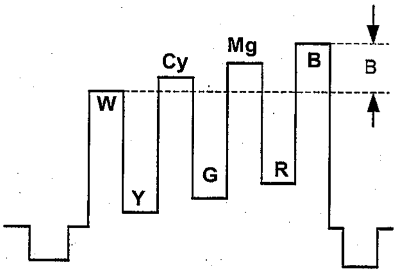
12. Chromatography phase (component input, 480i)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	480i video signal100% color bar pattern

1. Input the signal to COMPONENT terminal.
2. Connect the probe of the oscilloscope to AV PCB-TR-AR.
3. Alternatively adjust the <SERVICE MENU>signal block SG03(chromatography) and SG04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU>signal block SG07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



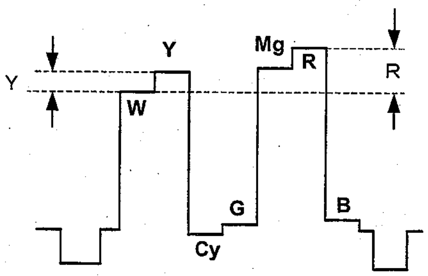
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

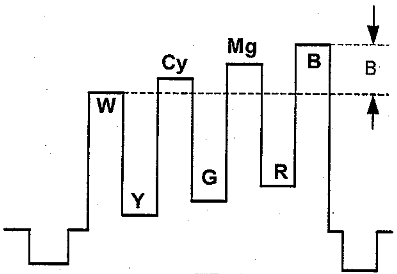
13. Chromatography phase (component input, 576I)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	576i video signal 75% color bar pattern

1. Input the signal to COMPONENT terminal.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU>signal block SH03(chromatography) and SH04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU>signal block SH07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



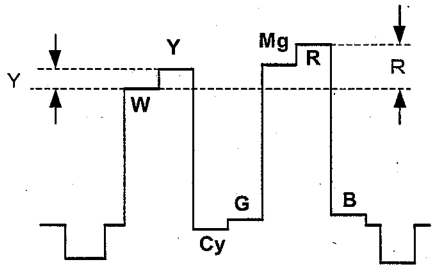
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

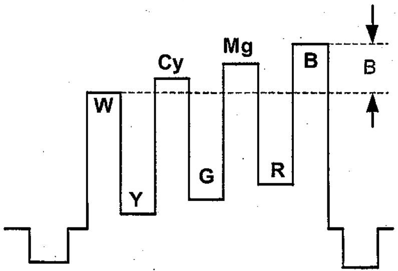
14. Chromatography phase (component input, 480p)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	480p video signal 100% color bar pattern

1. Input the signal to COMPONENT terminal.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SI03(chromatography) and SI04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SI07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



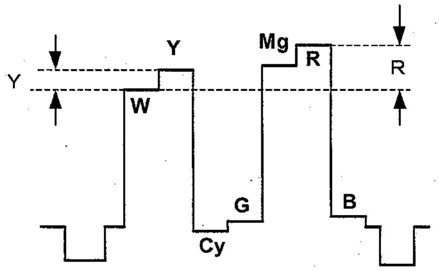
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

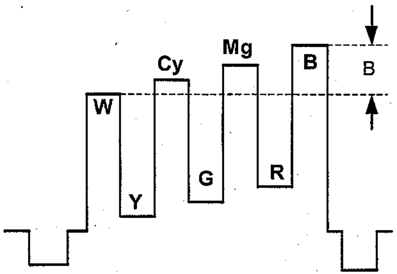
15. Chromatography phase (component input, 720p)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	720p video signal 100% color bar pattern

1. Input the signal to COMPONENT terminal.
2. Connect the probe of the oscilloscope to AV PCB TR-AR.
3. Alternatively adjust the <SERVICE MENU> signal block SJ03(chromatography) and SJ04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TR-AB.
5. Adjust the <SERVICE MENU> signal block SJ07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



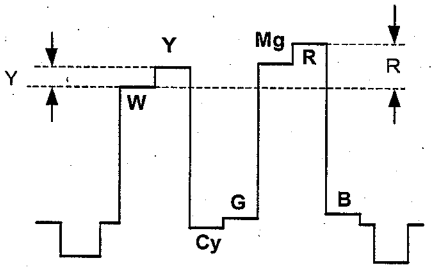
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

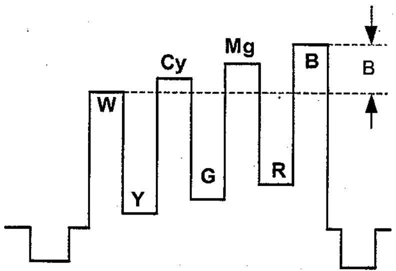
16. Chromatography phase (component input, 1080i)

Measuring instruments	Oscilloscope / Video signal generator
Preparation before adjustments	The <PICTURE ADJ.> of the <MAIN MENU> should be initialized.
Signals to be used	1080i video signal 100% color bar pattern

1. Input the signal to COMPONENT terminal.
2. Connect the probe of the oscilloscope to AV PCB TP-AB.
3. Alternatively adjust the <SERVICE MENU> signal block SK03(chromatography) and SK04(phase) so that the electric potential difference "R" and "Y" shown in the Fig. fall within the values indicated in the following table.
4. Connect the probe of the oscilloscope to AV PCB TP-AB.
5. Adjust the <SERVICE MENU> signal block SK07(B-Y gain) so that the electric potential difference "B" shown in the Fig. falls within the value indicated in the following table.



TP-AR



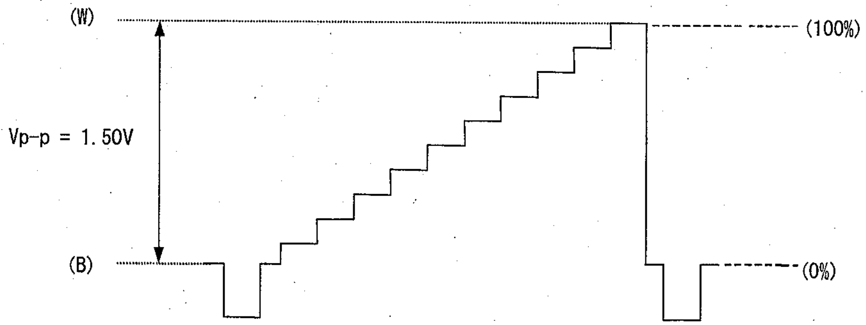
TP-AB

	Adjusting value (V)
R	0
Y	0
B	0

17. AD input level （NTSC）

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signal to be used	Composite video signal 10 STEP pattern Chromatography signal should be turned OFF.

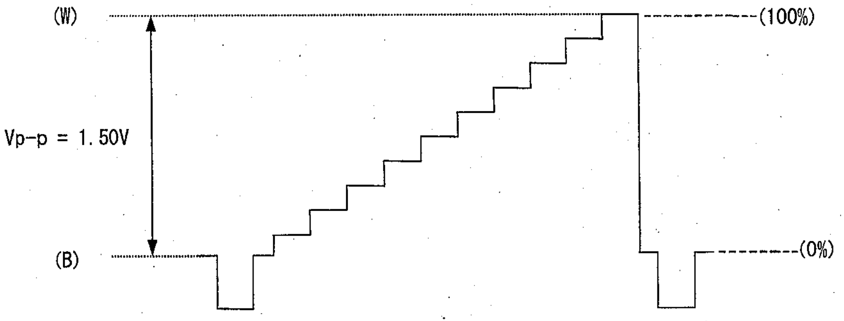
1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to the digital PCB TP-G5 (IC205 ⑮ pin – the fifth bit from the bottom)
3. Adjust the <SERVICE MENU> signal block SA01 （AD input level） so that the amplitude between black signal portion and white 100% portion becomes 1.50V.



18. AD input level（480i)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signal to be used	480i video signal 10 STEP pattern

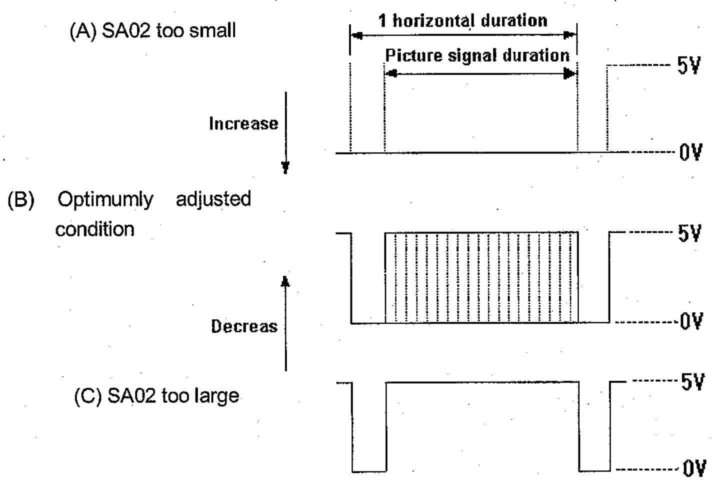
1. Input the Y signal to Y terminal of COMPONENT.
2. Connect the probe of the oscilloscope to the digital PCB TP-G.
3. Adjust the <SERVICE MENU>signal block SG1（AD input level） so that the amplitude between black signal portion and white 100 % portion becomes 1.50V.


(W)
(100%)
Vp-p = 1.50V
(B)
(0%)

19. AD input offset（NTSC)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal - All black pattern

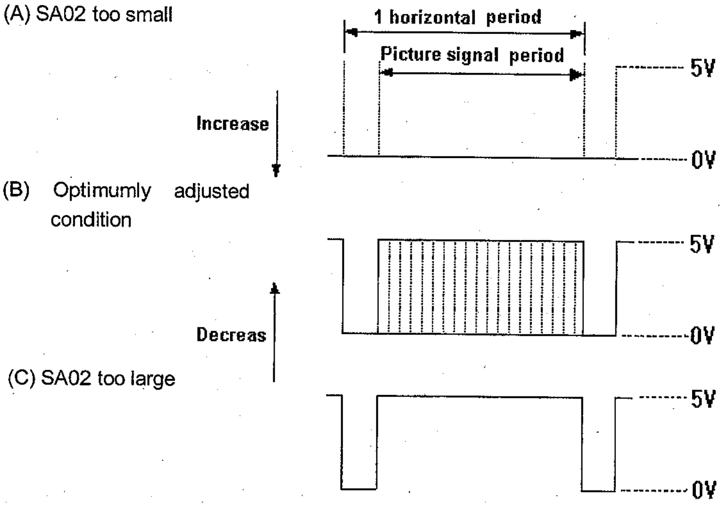
1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to the digital PCB TP-G5 （IC205 ⑮ pin - the fifth bit from the bottom）.
3. Adjust the <SERVICE MENU>signal block SA02 （AD input offset) so that the brightness Low(0 V) and High(5 V) of the digital signal voltage, which corresponds to the picture signal duration, become the same. Because there are many kinds of optimumly adjusted condition indicated by （B）, increase SA02 gradually to get the point where the first optimum condition is obtained.


(A) SA02 too small
1 horizontal duration
Picture signal duration
5V
0V
Increase
(B) Optimumly adjusted condition
5V
0V
Decreas
(C) SA02 too large
5V
0V

20. AD input offset（480i)

Measuring Instruments	Oscilloscope / Video signal generator
Signals to be used	COMPONENT video signal - All black pattern

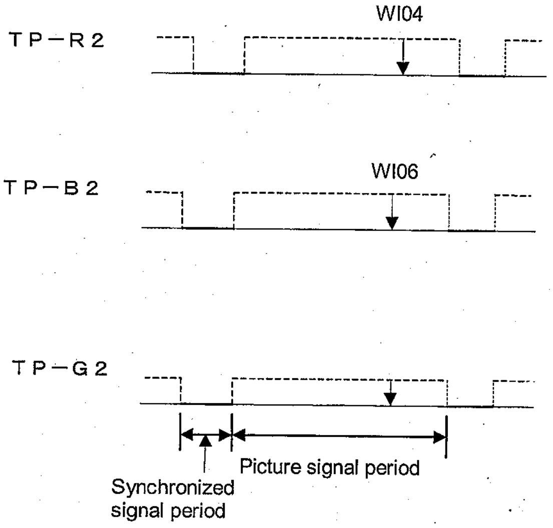
1. Input the Y signal to Y terminal of COMPONET.
2. Connect the probe of the oscilloscope to the digital PCB TP-G5 (IC205⑮ pin - the fifth bit from the bottom) .
3. Adjust the <SERVICE MENU>signal block SG02 (AD input offset) so that the brightness Low(0 V) and High(5V) of the digital signal voltage, which corresponds to the picture signal period, become the same. There are many kinds of optimumly adjusted condition indicated by（B）. Obtain the optimum condition within 2~3 from the first value.


(A) SA02 too small
1 horizontal period
Picture signal period
5V
0V
Increase
(B) Optimumly adjusted condition
5V
0V
Decreas
(C) SA02 too large
5V
0V

21. Color difference offset (video)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal - all black pattern / Chromatography signal should be turned OFF.

1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to the digital PCB TP-R2 、TP-G2 and TP-B2.
3. Adjust the <SERVICE MENU>WB block WI04(R offset) / WI06 (B offset) so that the offset between the picture signal period and the synchronized signal period is eliminated. If WI04 / WI06 are decreased too much, an offset will be generated on TP-G2. Therefore, all three wave forms shall be adjusted properly so that there are no offsets.

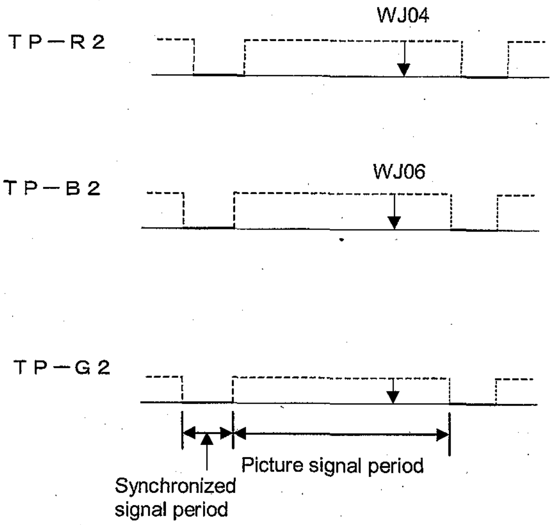

WI04
TP－R2
WI06
TP－B2
TP－G2
Picture signal period
Synchronized signal period

Etting of oscilloscope	
Horizontal	10 μ S/div
Vertical	0.1 V/div

22. Color difference offset (480i)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal - all black pattern / Chromatography signal should be turned OFF.

4. Input the signal to VIDEO A.
5. Connect the probe of the oscilloscope to the digital PCB TP-R2 、TP-G2 and TP-B2.
6. Adjust the <SERVICE MENU> signal block WJ04(R offset) / WJ06 (B offset) so that the offset between the picture signal period and the synchronized signal period is eliminated. If WJ04 / WJ06 are decreased too much, an offset will be generated on TP-G2. Therefore, all three wave forms shall be adjusted properly so that there are no offsets.

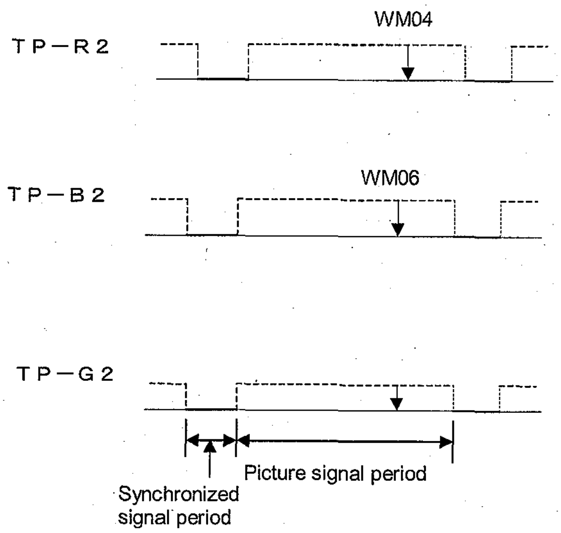


Etting of oscilloscope	
Horizontal	10 μ S/div
Vertical	0.1 V/div

23. Color difference offset (RGB15k)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal - all black pattern / Chromatography signal should be turned OFF.

7. Input the signal to VIDEO A.
8. Connect the probe of the oscilloscope to the digital PCB TP-R2 、TP-G2 and TP-B2.
9. Adjust the <SERVICE MENU> signal block WM04(R offset) / WM06 (B offset) so that the offset between the picture signal period and the synchronized signal period is eliminated. If WM04 / WM06 are decreased too much, an offset will be generated on TP-G2. Therefore, all three wave forms shall be adjusted properly so that there are no offsets.

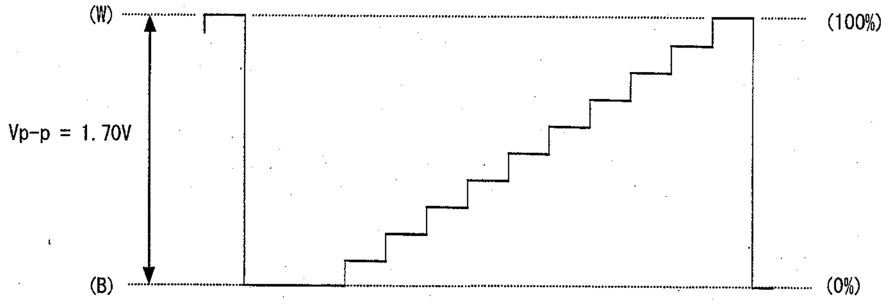


Etting of oscilloscope	
Horizontal	10 μ S/div
Vertical	0.1 V/div

24. Contrast (NTSC)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal – 10 STEP pattern Chromatography signal should be turned OFF.

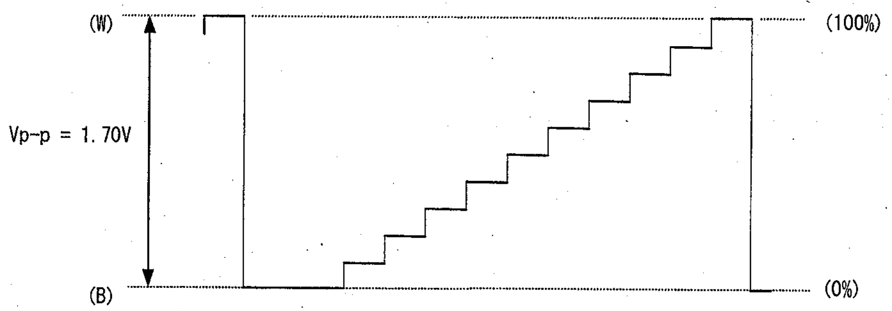
1. Input the signal to VIDEO A.
2. Connect the probe of the oscilloscope to the digital PCB TP-G2.
3. Adjust the <SERVICE MENU>signal block SA10 so that the electric potential difference shown in the Fig. Becomes1.70V.



25. Contrast (VGA)

Measuring Instruments	Oscilloscope / PC video signal generator
Signals to be used	VGA signal 640 x 480 dots (Horizontal frequency: 31.5KHz, Vertical frequency: 60Hz) Gray scale pattern

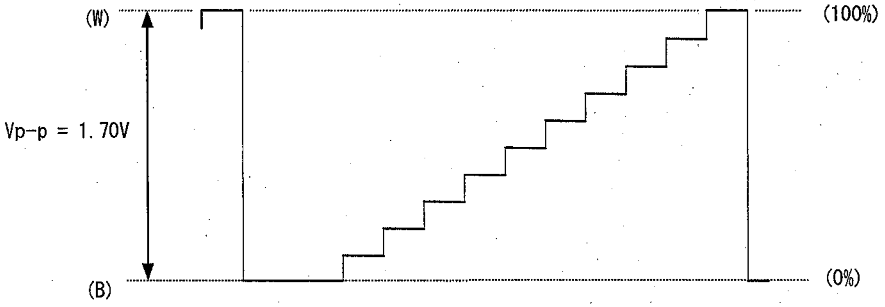
1. Input the signal to PC terminal.
2. Connect the probe of the oscilloscope to the digital PCB TP-G.
3. Adjust the <SERVICE MENU>signal block SL01 so that the electric potential difference shown in the Fig. Becomes1.70V.



26. Contrast (480i)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	480i video signal - 10 STEP pattern

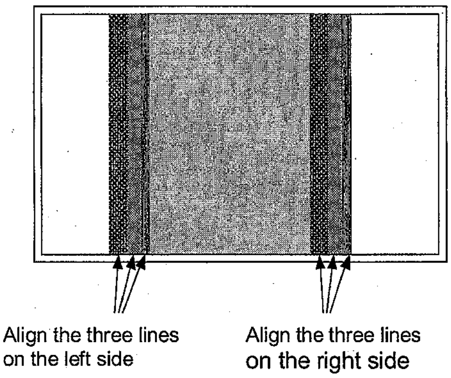
1. Input the Y signal to Y terminal of COMPONENT.
2. Connect the probe of the oscilloscope to the digital PCB TP-G2.
3. Adjust the <SERVICE MENU>signal block SG10 so that the electric potential differences shown in the Fig. Becomes1.70V.



27. RGB balance (NTSC)

Measuring Instruments	Oscilloscope / NTSC video signal generator
Signals to be used	Composite video signal - ramp pattern Chromatography signal should be turned OFF.

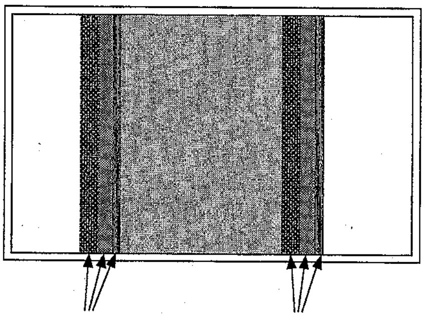
1. Input the signal to VIDEO A.
2. Change the <SERVICE MENU>CPU block CH01 from "0" to "2" to enter the test mode for R/G/B balance.
3. Adjust the <SERVICE MENU>WHITE BALANCE block WC04(R CUTOFF) and WC06(B CUTOFF) so that the three lines at the left side on the PDP panel are aligned. Don't move WC05(G CUTOFF).
4. Then adjust the <SERVICE MENU> WHITE BALANCE block WC01(R DRIVE) and WC03(B DRIVE) so that the three lines on the right side on the PDP panel are aligned. Don't move WC02 (G DRIVE).
5. Because the lines aligned in the step 3. will shift as the result of the adjustment in the step 4. , repeat the steps 3.. and 4. so that the three lines on the left and right sides are aligned respectively.
6. Return the <SERVICE MENU> CH01 from "2" to "0" .


Align the three lines on the left side
Align the three lines on the right side

28. RGB balance (480i)

Measuring Instruments	Oscilloscope
Signals to be used	480i video signal - ramp pattern Chromatography signal should be turned OFF.

1. Input the signal to COMPONENT terminal.
2. Change the <SERVICE MENU>CPU block CH01 from “0” to “2” to enter the test mode for R/G/B balance.
3. Adjust the <SERVICE MENU>WHITE BALANCE block WE04(R CUTOFF) and WE06(B CUTOFF) so that the three lines at the left side on the PDP panel are aligned. Don't move WE05(G CUTTOFF).
4. Then adjust the <SERVICE MENU> WHITE BALANCE block WE01(R DEIVE) and WE03(B DEIVE) so that the three lines on the right side on the PDP panel are aligned. Don't move WE02(G DRIVE).
5. Because the lines aligned in the step 3. will shift as the result of the adjustment in the step 4. repeat the steps 3. and 4. so that the three lines on the left and right sides are aligned respectively.
6. Return the <SERVICE MENU> CH01 from “2” to “0” .

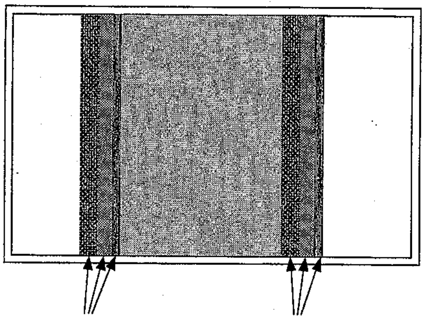


Align the three lines on the left side
Align the three lines on the right side

29. RGB balance (RGB15k)

Measuring Instruments	Oscilloscope PC video signal generator
Signals to be used	RGB video signal (Horizontal frequency: 15.75KHz, Vertical frequency: 59.94Hz) ramp pattern

1. Input the signal to PC terminal.
2. Change the <SERVICE MENU>CPU block CH01 from “0” to “2” to enter the test mode for RGB balance.
3. Adjust the <SERVICE MENU>WHITE BALANCE block WK04(R CUTOFF) and WK06(B CUTOFF) so that the three lines at the left side on the PDP panel are aligned. Don't move WK05(G CUTTOFF).
4. Then adjust the <SERVICE MENU> WHITE BALANCE block WK01(R DRIVE) and WK03(B DRIVE) so that the three lines on the right side on the PDP panel are aligned. Don't move WA02(G DRIVE).
5. Because the lines aligned in the step 3. will shift as the result of the adjustment in the step 4., repeat the steps 3. and 4. so that the three lines on the left and right sides are aligned respectively.
6. Return the <SERVICE MENU> CH01 from “2” to “0” .

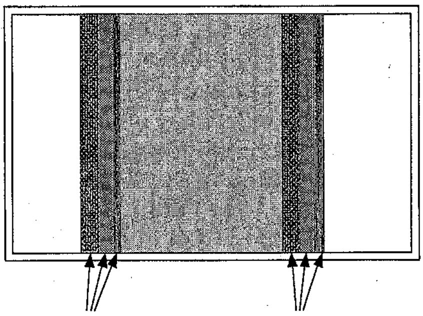


Align the three lines on the left side
Align the three lines on the right side

30. RGB balance (VGA)

Measuring Instruments	Oscilloscope PC video signal generator
Signals to be used	VGA signal 640 × 480 dots (Horizontal frequency: 31.5KHz, Vertical frequency: 60Hz) ramp pattern

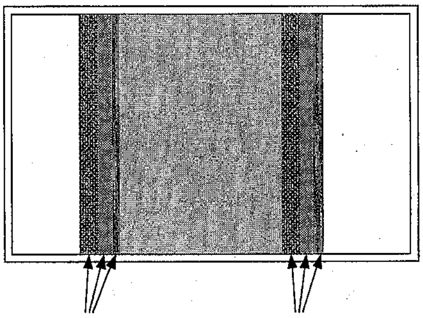
7. Input the signal to PC terminal.
8. Change the <SERVICE MENU>CPU block CH01 from "0" to "2" to enter the test mode for RGB balance.
9. Adjust the <SERVICE MENU>WHITE BALANCE block WA04(R CUTOFF) and WA06(B CUTOFF) so that the three lines at the left side on the PDP panel are aligned. Don't move WA05(G CUTTOFF).
10. Then adjust the <SERVICE MENU> WHITE BALANCE block WA01(R DRIVE) and WA03(B DRIVE) so that the three lines on the right side on the PDP panel are aligned. Don't move WA02(G DRIVE).
11. Because the lines aligned in the step 3. will shift as the result of the adjustment in the step 4., repeat the steps 3. and 4. so that the three lines on the left and right sides are aligned respectively.
12. Return the <SERVICE MENU> CH01 from "2" to "0".


Align the three lines on the left side
Align the three lines on the right side

31. RGB balance (1080i)

Measuring Instruments	Oscilloscope / Video signal generator
Signals to be used	1080i video signal - ramp pattern

1. Input the signal to COMPONENT terminal.
2. Change the <SERVICE MENU>CPU block CH01 from "0" to "2" to enter the test mode for R/G/B balance。
3. Adjust the <SERVICE MENU>WHITE BALANCE block WG04(R CUTOFF) and WG06(B CUTOFF) so that the three lines at the left side on the PDP panel are aligned. Don't move WG05(G CUTOFF).
4. Then adjust the <SERVICE MENU> WHITE BALANCE block WG01(R DRIVE) and WG03(B DRIVE) so that the three lines on the right side on the PDP panel are aligned. Don't move WG02(G DRIVE).
5. Because the lines aligned in the step 3. will shift as the result of the adjustment in the step 4. repeat the steps 3. and 4. so that the three lines on the left and right sides are aligned respectively.
6. Return the <SERVICE MENU> CPU block CH01 from "2" to "0".


Align the three lines on the left side
Align the three lines on the right side

32. White balance (NTSC)

Measuring Instruments	Video signal generator / Color temperature measuring device
Preparation before Adjustments	Wait for more than 20 minutes. If the power is turned off, start the adjusting after 5 minutes later from turning on again. The <PICTURE ADJ.> of the <MAIN MENU> should be initialized. This adjustment shall be done after completing the adjustment of RGB balance.
Signal to be used	NTSC video signal – window pattern (luminance 70%) Set the burst "ON".

1. Input the signal to VIDEO A.
2. Select HIGH in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
3. Adjust the <SERVICE MENU> WHITE BALANCE block WC07(R DRIVE) and WC08 (G DRIVE) so that the color temperature become the HIGH adjustment point as shown below. Leave WC09 (B DRIVE) at "255".
4. In case where adjustments cannot be done with step 3. temporarily return WC07(R DRIVE) and WC08(G DRIVE) to "255" and fix WC08(G DRIVE) at "255". Then adjust WC07(R DRIVE) and WC09 (B DRIVE) again.
5. Select LOW in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
6. Adjust the <SERVICE MENU> WD08 (G DRIVE) and WD09 (B DRIVE) so that the color temperature is at the Low adjustment point as shown below. Don't move WD07(R DRIVE).
7. In case where adjustments cannot be done with step 6. Temporarily return WD08(R DRIVE) and WD09 (G DRIVE) to "255" and fix WD08 (G DRIVE) at "255". Then adjust WD07(R DRIVE) and WD09 (B DRIVE) again.

COLOR TEMP.	COLOR TEMP. ADJUSTING POINT
HIGH (EQUIVALENT TO D93)	x = 0.283 y = 0.297
LOW (EQUIVALENT TO D65)	x = 0.313 y = 0.329

33. White balance (480i)

Measuring Instruments	Video signal generator / Color temperature measuring device
Preparation before Adjustments	Wait for more than 20 minutes. If the power is turned off, start the adjusting after 5 minutes later from turning on again. The <PICTURE ADJ.> of the <MAIN MENU> should be initialized. This adjustment shall be done after completing the adjustment of RGB balance. This adjustment shall be done after completing the adjustment of NTSC white balance.
Signal to be used	480i video signal – window pattern (luminance 70%)

1. Input the signal to COMPONENT terminal.
2. Select HIGH in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
3. Adjust the <SERVICE MENU> WHITE BALANCE block WE07(R DRIVE), WE08(G DRIVE) and WE09(G DRIVE) so that the color temperature become the HIGH adjustment point as shown below. At this time, the adjustment is made after fixing the color, which was fixed at NTSC white balance HIGH, to "0".
4. In case where adjustments cannot be done by fixing BLUE to "0" in step 3. fix GREEN to "0". In case where adjustments cannot be done by fixing GREEN to "0" in step 3. fix RED to "0".
5. Select LOW in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
6. Adjust the <SERVICE MENU> WF08(G DRIVE) and WF09(B DRIVE) so that the color temperature is at the Low adjustment point as shown below. At this time, the adjustment is made after fixing the color, which was fixed at NTSC white balance HIGH, to "0"
7. In case where adjustments cannot be done by fixing RED to "0" in step 6. fix GREEN to "0". In case where adjustments cannot be done by fixing GREEN to "0" in step 3. fix BLUE to "0".

COLOR TEMP.	COLOR TEMP. ADJUSTING POINT
HIGH (EQUIVALENT TO D93)	X = 0.283 y = 0.297
LOW (EQUIVALENT TO D65)	X = 0.313 y = 0.329

34. White balance (RGB15k)

Measuring Instruments	PC video signal generator / Color temperature measuring device
Preparation before Adjustments	Wait for more than 20 minutes. If the power is turned off, start the adjusting after 5 minutes later from turning on again. The <PICTURE ADJ.> of the <MAIN MENU> should be initialized. This adjustment shall be done after completing the adjustment of RGB balance.
Signal to be used	RGB video signal (Horizontal frequency: 15.75KHz, Vertical frequency: 59.94Hz) Window pattern (luminance 70%)

1. Input the signal to PC terminal.
2. Select HIGH in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
3. Adjust the <SERVICE MENU> WHITE BALANCE block WK07(R DRIVE) and WK08 (G DRIVE) so that the color temperature become the HIGH adjustment point as shown below. Don't move WK09 (B DRIVE).
4. In case where adjustments cannot be done with step 3. temporarily return WK07(R DRIVE) and WK08(G DRIVE) to "255" and fix WK08 (G DRIVE) at "255". Then adjust WK07(R DRIVE) and WK09 (B DRIVE) again.
5. Select LOW in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
6. Adjust the <SERVICE MENU> WL08(G DRIVE) and WL09 (B DRIVE) so that the color temperature is at the Low adjustment point as shown below. Don't move WL07(R DRIVE).
7. In case where adjustments cannot be done with step 6., temporarily return WL08(R DRIVE) and WL09 (G DRIVE) to "255" and fix WL08 (G DRIVE) at "255". Then adjust WL07(R DRIVE) and WL09 (B DRIVE) again.

COLOR TEMP.	COLOR TEMP. ADJUSTING POINT
HIGH (EQUIVALENT TO D93)	x = 0.283 y = 0.297
LOW (EQUIVALENT TO D65)	x = 0.313 y = 0.329

35. White balance (VGA)

Measuring Instruments	PC video signal generator / Color temperature measuring device
Preparation before Adjustments	Wait for more than 20 minutes. If the power is turned off, start the adjusting after 5 minutes later from turning on again. The <PICTURE ADJ.> of the <MAIN MENU> should be initialized. This adjustment shall be done after completing the adjustment of RGB balance.
Signal to be used	VGA video signal 640×480 dots (Horizontal frequency: 31.5KHz, Vertical frequency: 60Hz) Window pattern

8. Input the signal to PC terminal.
9. Select HIGH in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
10. Adjust the <SERVICE MENU> WHITE BALANCE block WA07(R DRIVE) and WA08 (G DRIVE) so that the color temperature become the HIGH adjustment point as shown below. Don't move WA09 (B DRIVE).
11. In case where adjustments cannot be done with step 3. temporarily return WA07(R DRIVE) and WA08(G DRIVE) to "255" and fix WA08(G DRIVE) at "255". Then adjust WA07(R DRIVE) and WA09 (B DRIVE) again.
12. Select LOW in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
13. Adjust the <SERVICE MENU> WB08(G DRIVE) and WB09(B DRIVE) so that the color temperature is at the Low adjustment point as shown below. Don't move WB07(R DRIVE).
14. In case where adjustments cannot be done with step 6., temporarily return WB08(R DRIVE) and WB09 (G DRIVE) to "255" and fix WB08 (G DRIVE) at "255". Then adjust WB07(R DRIVE) and WB09 (B DRIVE) again.

COLOR TEMP.	COLOR TEMP. ADJUSTING POINT
HIGH (EQUIVALENT TO D93)	x = 0.283 y = 0.297
LOW (EQUIVALENT TO D65)	x = 0.313 y = 0.329

36. White balance (1080i)

Measuring Instruments	Video signal generator / Color temperature measuring device (Color temperature meter)
Preparation before Adjustments	Wait for more than 20 minutes. If the power is turned off, start the adjusting after 5 minutes later from turning on again. The <PICTURE ADJ.> of the <MAIN MENU> should be initialized. This adjustment shall be done after completing the adjustment of RGB balance.
Signal to be used	1080i video signal - window pattern (luminance 70%)

1. Input the signal to COMPONENT terminal.
2. Select HIGH in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
3. Adjust the <SERVICE MENU> WHITE BALANCE block WG07(R DRIVE) and WG08 (G DRIVE) so that the color temperature become the HIGH adjustment point as shown below. At this time, the adjustment is made after fixing the color, which was fixed at VGA white balance HIGH, to "0".
4. In case where adjustments cannot be done by fixing BLUE to "0" in step 3, fix GREEN to "0". In case where adjustments cannot be done by fixing GREEN to "0" in step 3 , fix RED to "0".
5. Select LOW in the steps of <MAIN MENU> → <FUNCTION SELECT> → COLOR TEMP.
6. Adjust the <SERVICE MENU> WH08 (G DRIVE) and WH09 (B DRIVE) so that the color temperature is at the LOW adjustment point as shown below. At this time, the adjustment is made after fixing the color, which was fixed at VGA white balance LOW, to "0".
7. In case where adjustments cannot be done by fixing RED to "0" in step 6, fix GREEN to "0". In case where adjustments cannot be done by fixing GREEN to "0" in step 6, fix BLUE to "0".

COLOR TEMP.	COLOR TEMP. ADJUSTING POINT
HIGH (EQUIVALENT TO D93)	x = 0.283 y = 0.297
LOW (EQUIVALENT TO D65)	x = 0.313 y = 0.329

37. Bright (NTSC)

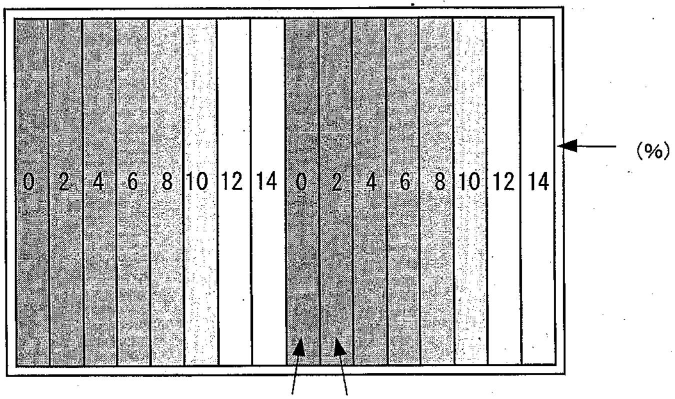
Measuring Instruments	Video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	Video signal NTSC – Gray scale pattern

1. Input the signal to VIDEO A.
2. Adjust the <SERVICE MENU> signal block SA11 so that the black area of 0 % shines slightly. (Care must be taken not to make the panel screen with the state of "black embossment".)

38. Bright（VGA）

Measuring Instruments	PC video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	・VGA video signal 640×480 dots (Horizontal frequency: 31.5KHz, Vertical frequency: 60Hz) Gray scale pattern (2% STEP)

1. Input the signal to PC terminal.
2. Adjust the <SERVICE MENU> signal block SL02 so that the black area of 2 % shines slightly and the black area of 0% does not shine with the brightness more than the pre-discharge brightness on the panel screen. (Care must be taken not to make the panel screen with the state of "black embossment".)

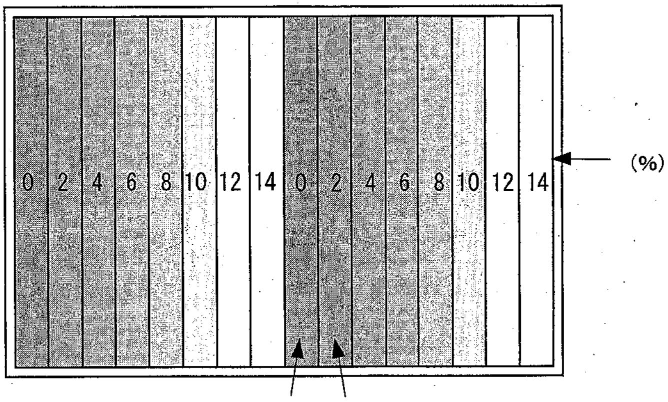


0% Black area of 2% shinesslightly

39. Bright（480i）

Measuring Instruments	Video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	480i video signal - Gray scale pattern (2% STEP)

1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> signal block SG11 so that the black area of 2 % shines slightly and the black area of 0% does not shine with the brightness more than the pre-discharge brightness on the panel screen.
(Care must be taken not to make the panel screen with the state of "black embossment".)

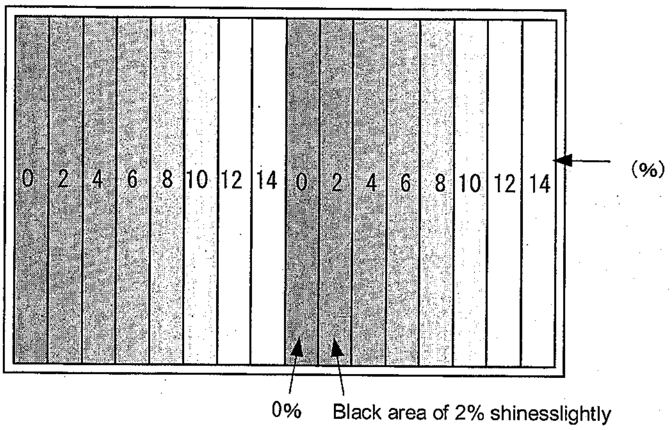


0% Black area of 2% shinesslightly

40. Bright (480p)

Measuring Instruments	Video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	480p video signal - Gray scale pattern (2% STEP)

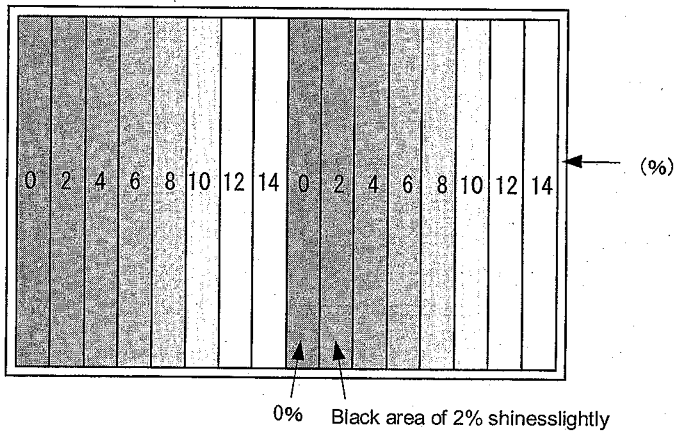
1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> signal block SI02 so that the black area of 2 % shines slightly and the black area of 0 % does not shine with the brightness more than the pre-discharge brightness on the panel screen.
   (Care must be taken not to make the panel screen with the state of "black embossment".)



41. Bright (720p)

Measuring Instruments	Video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	720p video signal - Gray scale pattern (2% STEP)

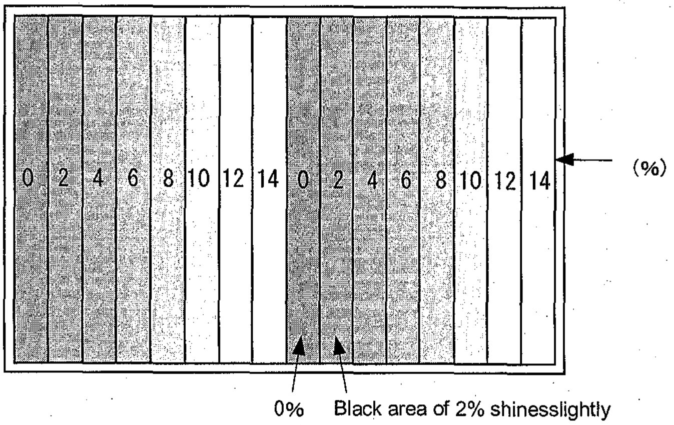
1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> signal block SJ02 so that the black area of 2 % shines slightly and the black area of 0 % does not shine with the brightness more than the pre-discharge brightness on the panel screen.
   (Care must be taken not to make the panel screen with the state of "black embossment".)



42. Bright (1080i)

Measuring Instruments	Video signal generator
Preparation before Adjustments	Adjustments of contrast and white balance shall be completed beforehand. The <PICTURE ADJ.> of the <MAIN MENU> shall be initialized.
Signals to be used	1080i video signal - Gray scale pattern (2% STEP)

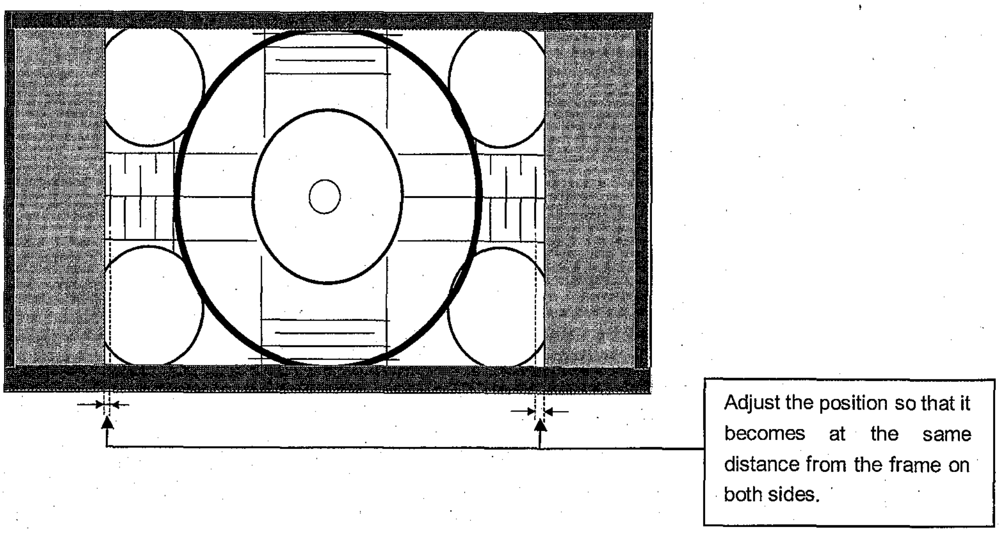
1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> signal block SK02 so that the black area of 2 % shines slightly and the black area of 0% does not shine with the brightness more than the pre-discharge brightness on the panel screen.
   (Care must be taken not to make the panel screen with the state of "black embossment".)



43. NTSC horizontal screen position (REGULAR)

Measuring Instruments	Video signal generator
Signals to be used	Video signal NTSC - Monoscope pattern or cross-hatch pattern

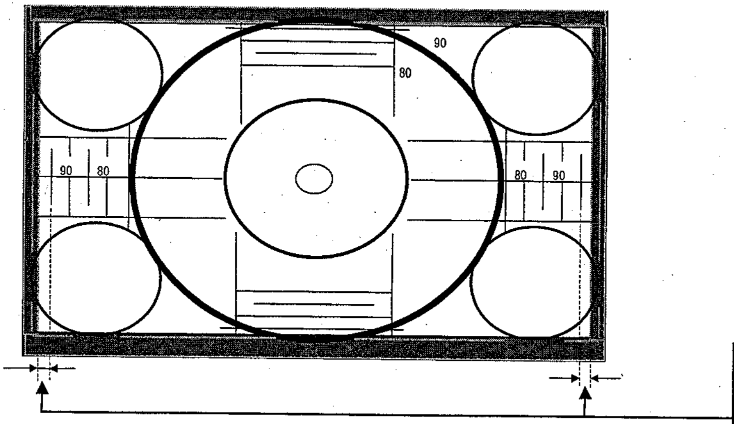
1. Input the signal to VIDEO A.
2. Change ASPECT to REGULAR after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU> SIZE/POSITION block DA18 so that the horizontal screen is positioned at the same distance from both sides.


Adjust the position so that it becomes at the same distance from the frame on both sides.

44. NTSC Horizontal screen position (FULL, ZOOM, PANORAMIC)

Measuring Instruments	Video signal generator
Signals to be used	Video signal NTSC - Monoscope pattern or cross-hatch pattern

1. Input the signal to VIDEO A.
2. Change ASPECT to FULL after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU>SIZE/POSITION block DB18 so that the horizontal screen position is placed on the same distance from the left and right sides.
4. Change ASPECT to ZOOM.
5. Adjust the <SERVICE MENU> SIZE/POSITION block DC18 so that the horizontal screen position is placed on the same distance from the left and right sides.
6. Change ASPECT to PANORAMIC.
7. Adjust the <SERVICE MENU>SIZE/POSITION block DD18 so that the horizontal screen position is placed on the same distance from the left and right sides.

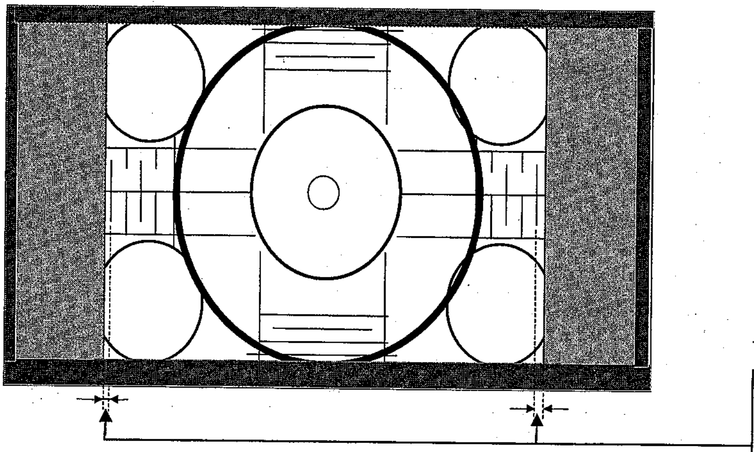


Adjust the position so that it becomes at the same distance from the frame on both sides.

45. PAL horizontal screen position (REGULAR)

Measuring Instruments	Video signal generator
Signals to be used	Video signal PAL - Monoscope pattern or cross-hatch pattern

1. Input the signal to VIDEO A.
2. Change ASPECT to REGULAR after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU> SIZE/POSITION block DE18 so that the horizontal screen is positioned at the same distance from both sides.

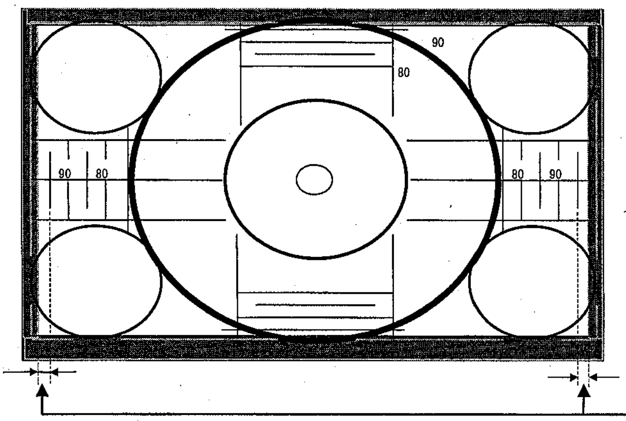


Adjust the position so that it becomes at the same distance from the frame on both sides.

46. PAL Horizontal screen position (FULL, ZOOM, PANORAMIC)

Measuring Instruments	Video signal generator
Signals to be used	Video signal PAL - Monoscope pattern or cross-hatch pattern

1. Input the signal to VIDEO A.
2. Change ASPECT to FULL after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU> SIZE/POSITION block DF18 so that the horizontal screen position is placed on the same distance from the left and right sides.
4. Change ASPECT to ZOOM.
5. Adjust the <SERVICE MENU> SIZE/POSITION block DG18 so that the horizontal screen position is placed on the same distance from the left and right sides.
6. Change ASPECT to PANORAMIC.
7. Adjust the <SERVICE MENU> SIZE/POSITION block DH18 so that the horizontal screen position is placed on the same distance from the left and right sides.

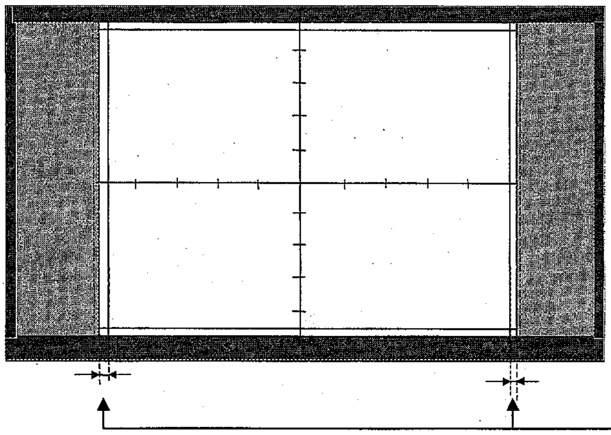


Adjust the position so that it becomes at the same distance from the frame on both sides.

47. 480p Horizontal screen position (NORMAL)

Measuring Instruments	Video signal generator
Signals to be used	480 p video signal - Position adjusting pattern or cross-hatch pattern

1. Input the signal to COMPONENT terminal.
2. Change ASPECT to REGULAR after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU> SIZE/POSITION block DI18 so that the horizontal screen is positioned at the same distance from both sides.

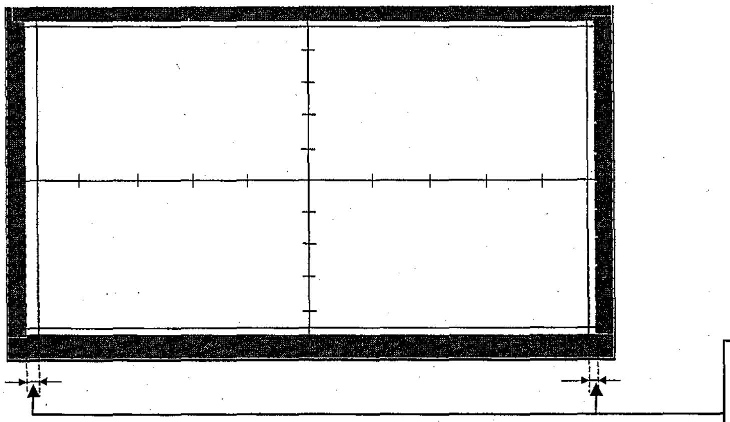


Adjust the position so that it becomes at the same distance from the frame on both sides.

48. 480p Horizontal screen position (FULL)

Measuring Instruments	Video signal generator
Signals to be used	480 p video signal - Position adjusting pattern or cross-hatch pattern

1. Input the signal to COMPONENT terminal.
2. Change ASPECT to REGULAR after the steps of < MAIN MENU > → < FUNCTION SELECT >.
3. Adjust the <SERVICE MENU> SIZE/POSITION block DJ 18 so that the horizontal screen is positioned at the same distance from both sides.

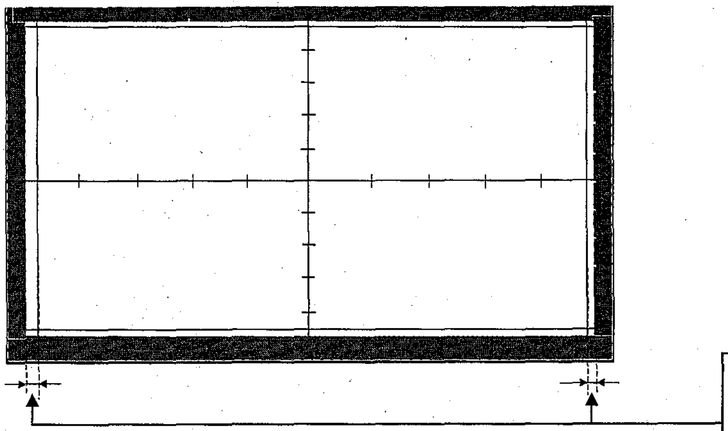


Adjust the position so that it becomes at the same distance from the frame on both sides.

49. 720p Horizontal screen position

Measuring Instruments	Video signal generator
Signals to be used	720p video signal - Position adjusting pattern or cross-hatch pattern

1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> SIZE/POSITION block DK 18 so that the horizontal screen is positioned at the same distance from both sides.

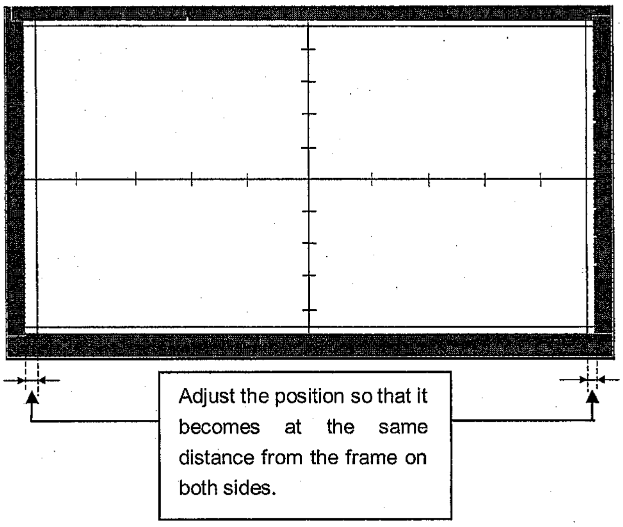


Adjust the position so that it becomes at the same distance from the frame on both sides.

50. 1080i Horizontal screen position

Measuring Instruments	Video signal generator
Signals to be used	1080i video signal - Position adjusting pattern or cross-hatch pattern

1. Input the signal to COMPONENT terminal.
2. Adjust the <SERVICE MENU> SIZE/POSITION block DL18 so that the horizontal screen is positioned at the same distance from both sides.


Adjust the position so that it becomes at the same distance from the frame on both sides.

51. PC horizontal screen position

Measuring Instruments	PC video signal generator
Signals to be used	PC video signal - circle pattern or cross-hatch pattern

1. Input the signal to PC terminal.
2. Make sure that the ∗-mark is shown after the frequency status indication such as 24KHz and 56Hz.
3. Change ASPECT to REGULAR after the steps < MAIN MENU > → < FUNCTION SELECT >.
4. Check the both ends of the left and right sides of the screen position and adjust the <SERVICE MENU>[A] (DO18 when PC98 is used) so that the horizontal screen position is centered.
5. Change ASPECT to FULL after the steps < MAIN MENU > → < FUNCTION SELECT >.
6. Check the both ends of the left and right sides of the screen position and adjust the <SERVICE MENU>[B] (DP18 in case where PC98 is used) so that the horizontal screen position is centered.
7. Make the same adjustments for the preset signal given below.

No.	PRESET SIGNAL	FREQUENCY		NUMBER OF EFFECTIVE PIXELS		SERVICE NO. FOR SERVICE	
		HORIZONTAL (kHz)	VERTICAL (Hz)	HORIZONTAL (dot)	VERTICAL (dot)	NORMAL [A]	FULL [B]
1	PC98	24.82	56.42	640	400	DO18	DP18
2	VGA400-70	31.47	70.09	640	400	DM18	DN18
3	VGA-60	31.47	59.94	640	480	DQ18	DR18
4	VGA-72	37.86	72.81	640	480	DS18	DT18
5	VGA-75	37.50	75.00	640	480	DU18	DV18
6	MAC13"	35.00	66.67	640	480	DW18	DX18
7	SVGA-56	35.16	56.25	800	600	DZ18	DAA18
8	SVGA-60	37.88	60.32	800	600	DAB18	DAC18
9	SVGA-72	48.08	72.19	800	600	DY18	DAJ18
10	XGA-60	48.36	60.00	1024	768	DAD18	DAK18
11	XGA-70	56.48	70.07	1024	768	DAE18	DAL18
12	RGB15K-60Hz	15.73	59.94	768	485	DAF18	DAG18

- MEMO -

OPERATING INSTRUCTIONS

JVC

ENGLISH
DEUTSCH
FRANÇAIS
ITALIANO
ESPAÑOL
中文

PLASMA DISPLAY MONITOR

BEDIENUNGSANLEITUNG : PLASMABILDSCHIRM
MANUEL D'INSTRUCTIONS : MONITEUR DE VISUALISATION PLASMA
MANUALE D'ISTRUZIONI : MONITOR CON SCHERMO AL PLASMA
MANUAL DE INSTRUCCIONES : MONITOR DISPLAY DE PLASMA
使用說明書：等離子體顯示監視器

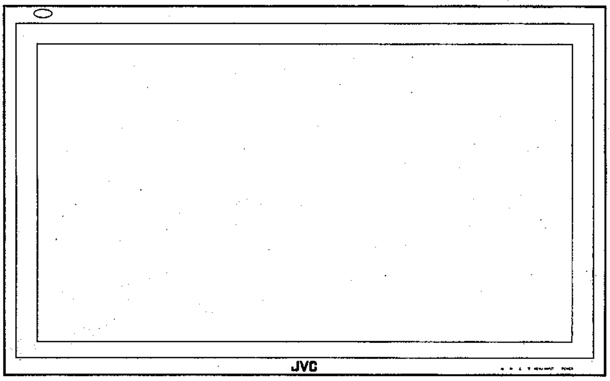
GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G
GD-V4211PCE

INSTRUCTIONS

For customer Use:
Enter below the Model No. and the Serial No. which is located on the rear panel of the cabinet. Retain this information for future reference.

Model No. ______________________

Serial No. ______________________



JVC

INSTRUCTIONS

Model
GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G
GD-V4211PCE

Thank you for purchasing this JVC Monitor.
Before using the monitor, read this manual carefully so that you know how to use the Monitor correctly.
Refer to this manual whenever questions or problems about operation arise. Be sure to read and observe the safety precautions.
Keep this manual where the user can see it easily.
** Installation and removal require special expertise. Consult your product dealer for details.*

This instruction manual refers to the GD-V4210PZW, GD-V4210PZW-G, GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE.
The explanations and illustrations used in this instruction manual are of the GD-V4210PZW unless otherwise stated.
The differences between each model are as follows:

		GD-V4210PZW	GD-V4210PZW-G	GD-V4210PCE	GD-V4210PCE-G	GD-V4211PCE
Frame Colour		Silver	Gray	Silver	Gray	Silver
Inputs	VIDEO A	Available		Not available*1		
	VIDEO B	Available		Not available*1		
	COMPONENT	Available		Not available*1		

*1 These inputs will be available with the separately-purchased video interface kit (IF-C421P1W).
Ask your dealer to install the video interface kit.

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Safety Precautions

FCC NOTICE

■ GD-V4210PZW / GD-V4210PZW-G / GD-V4210PCE / GD-V4210PCE-G

CAUTION: Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

■ GD-V4211PCE

CAUTION: Changes or modifications not approved by JVC could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

EUROPE EMC STANDARD NOTICE

■ GD-V4210PZW / GD-V4210PZW-G / GD-V4210PCE / GD-V4210PCE-G

Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measure.

IMPORTANT INFORMATION

WARNING: TO REDUCE THE RISK OF FIRE AND ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

IMPORTANT SAFEGUARDS

Electrical energy can perform many useful functions. This unit has been engineered and manufactured to assure your personal safety. But **IMPROPER USE CAN RESULT IN POTENTIAL ELECTRICAL SHOCK OR FIRE HAZARD**. In order not to defeat the safeguards incorporated into this product, observe the following basic rules for its installation, use and service. Please read these "Important Safeguards" carefully before use.

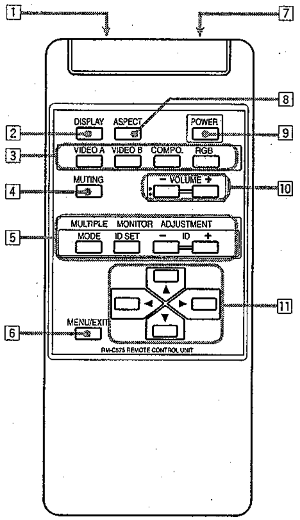
- All the safety and operating instructions should be read before the product is operated.
- The safety and operating instructions should be retained for future reference.
- All warnings on the product and in the operating instructions should be adhered to.
- All operating instructions should be followed.
- Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
- Do not use attachments not recommended by the product manufacturer as they may be hazardous.
- Do not use this product near water. Do not use immediately after moving from a low temperature to high temperature, as this causes condensation, which may result in fire, electric shock, or other hazards.
- Do not place this product on an unstable cart, stand, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the product. The product should be mounted according to the manufacturer's instructions, and should use a mount recommended by the manufacturer.

- When the product is used on a cart, care should be taken to avoid quick stops, excessive force, and uneven surfaces which may cause the product and cart to overturn, damaging equipment or causing possible injury to the operator.
- Slots and openings in the cabinet are provided for ventilation. These ensure reliable operation of the product and protect it from overheating. These openings must not be blocked or covered. (The openings should never be blocked by placing the product on bed, sofa, rug, or similar surface. It should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided and the manufacturer's instructions have been adhered to.)

  For proper ventilation, separate the product from other equipment, which may prevent ventilation and keep distance more than 10 cm (3 $^{15}/_{16}$ inches).
- This product should be operated only with the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.
- This product is equipped with a three-wire plug. This plug will fit only into a grounded power outlet. If you are unable to insert the plug into the outlet, contact your electrician to install the proper outlet. Do not defeat the safety purpose of the grounded plug.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them. Pay particular attention to cords at doors, plugs, receptacles, and the point where they exit from the product.
- For added protection of this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the cable system. This will prevent damage to the product due to lightning and power line surges.
- Do not overload wall outlets, extension cords, or convenience receptacles on other equipment as this can result in a risk of fire or electric shock.
- Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
- Do not attempt to service this product yourself as opening or removing covers may expose you to dangerous voltages and other hazards. Refer all service to qualified service personnel.
- Unplug this product from the wall outlet and refer service to qualified service personnel under the following conditions:
  - a) When the power supply cord or plug is damaged.
  - b) If liquid has been spilled, or objects have fallen on the product.
  - c) If the product has been exposed to rain or water.
  - d) If the product operated normally by following the operating instructions. Adjust only those controls that are covered by the Operation Manual, as an improper adjustment of controls may result in damage and will often require extensive work by a qualified technician to restore the product to normal operation.
  - e) If the product has been dropped or damaged in any way.
  - f) When the product exhibits a distinct change in performance – this indicates a need for service.
- When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or with same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
- The product should be placed more than 30 cm (11 $^{15}/_{16}$ inches) away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.
- When connecting other products such as VCR's, and personal computers, you should turn off the power of this product for protection against electric shock.
- Do not place combustibles behind the cooling fan. For example, cloth, paper, matches, aerosol cans or gas lighters that present special hazards when over heated.
- Use only the accessory cord designed for this product to prevent shock.

Parts Identification

Remote Control



1 **Remote signal transmission window**

2 **DISPLAY button (page 14)**
Use this button to display the input terminal, color system (for VIDEO A or B input), scan system (for COMPONENT input) and horizontal/vertical frequency (for RGB input). Pressing the button again will make the display disappear.

3 **VIDEO A, VIDEO B, COMPO. and RGB buttons (page 14)**
Use these buttons to switch between inputs.
To select the correct RGB input, you have to set "RGB INPUT" correctly on the menu (see page 23).

- Only for GD-V4210PCE, GD-V4210PCE-G and GD-V4211PCE: Only RGB input can be reproduced.
  To reproduce images through the other inputs, you need to install video interface kit (IF-C421P1W), which is separately purchased.

4 **MUTING button (page 14)**
Use this button to turn off the volume immediately. Pressing the button again will resume the previous volume level.

5 **MULTIPLE MONITOR ADJUSTMENT buttons (page 31)**
Use these buttons to set IDs, etc. when serial connection is made.

6 **MENU/EXIT button**
Use this button to display or erase menus.
While a sub-menu is displayed, pressing this button will move you one screen back to the preceding menu.

7 **Remote control cable jack (page 31)**
Connect the remote control cable when using this remote control as a wired remote control.

8 **ASPECT button (page 15)**
Use this button to switch between aspect ratios. Each time you press the button, the aspect ratio changes as follows:

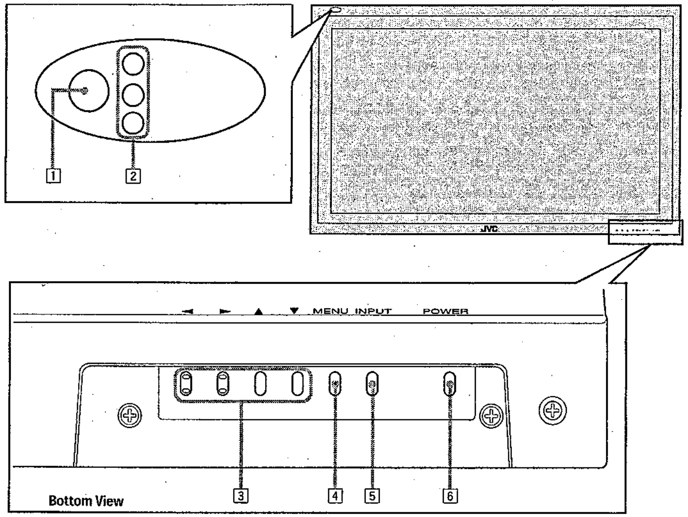
→ REGULAR ——→ FULL
└ PANORAMIC ←—— ZOOM ←┘

9 **POWER button (page 14)**
Use this button to turn on/off the power.

10 **VOLUME + / – buttons (page 14)**
Use these buttons to adjust the volume level.

11 **◄ / ► / ▲ / ▼ buttons**
Use these buttons to select menu items or make adjustments.

Monitor: Front View



1 **Remote sensor/power lamp**
Point the front end of the wireless remote control toward here.
When the Monitor is turned on, the power lamp glows green. It glows orange in standby mode.

2 **Self-diagnostic lamps (page 37)**
These lamps light/flash if something abnormal occurs with the Monitor.

3 **◄ / ► / ▲ / ▼ buttons**
Use these buttons to select menu items and to make adjustments.

- When no menu is displayed, you can use the ◄ / ► buttons to adjust the volume level.

4 **MENU button**
Use this button to display or erase menus.
While a sub-menu is displayed, pressing this button will move you one screen back to the preceding menu.

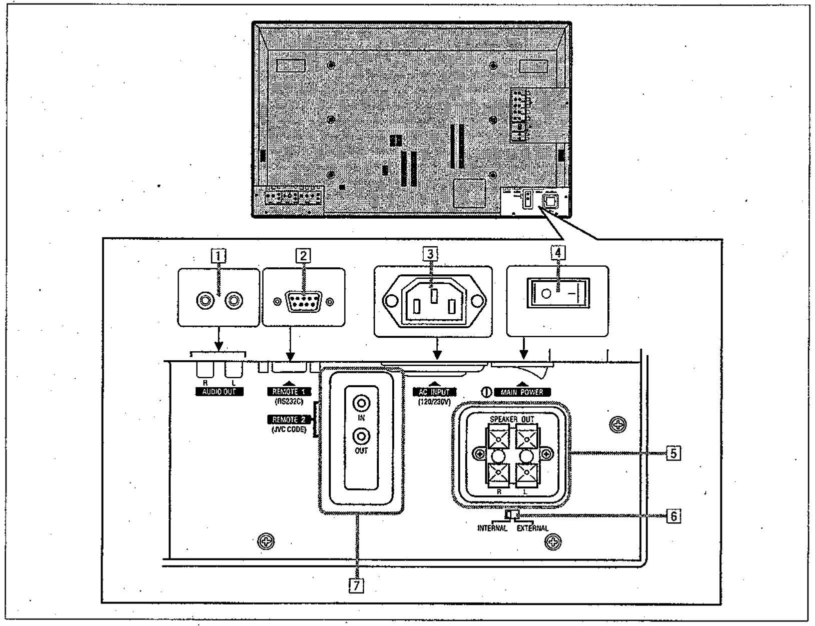
5 **INPUT button (page 14)**
Use this button to switch between inputs.
To select the correct RGB input, you have to set "RGB INPUT" correctly on the menu (see page 23).

- Only for GD-V4210PCE, GD-V4210PCE-G and GD-V4211PCE: Only RGB input can be reproduced.
  To reproduce images through the other inputs, you need to install video interface kit (IF-C421P1W), which is separately purchased.

6 **POWER button (page 14)**
Use this button to turn on and off the Monitor.

Parts Identification (Continued)

Monitor: Rear Views



1 **AUDIO output terminal (pin jack) (page 12)**
Connect these terminals to the audio input terminals of external equipment such as an amplifier.

2 **REMOTE 1 (RS232C) terminal (D-sub, 9-pin) (page 12)**
Connect this terminal to the RS-232C terminal of a personal computer.
- For the control method using this terminal, consult an authorized JVC dealer.

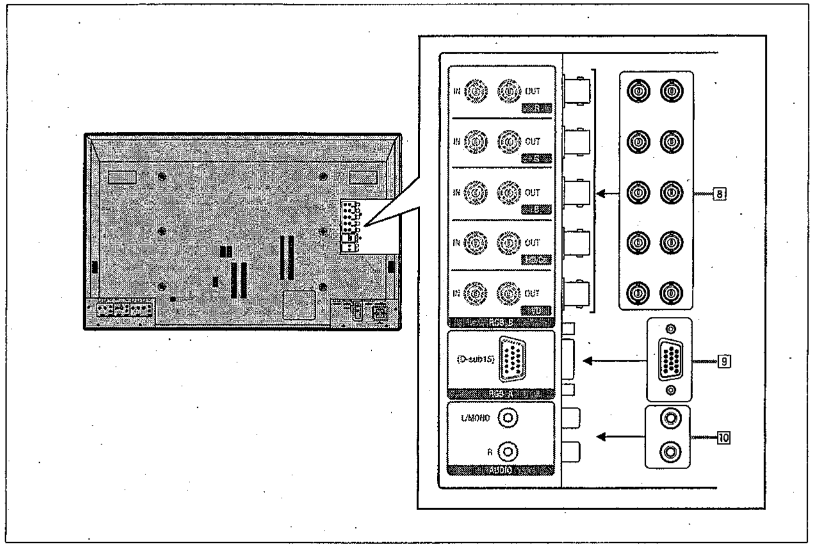
3 **AC INPUT terminal (page 12)**
Connect the supplied power cord to this terminal.

4 **MAIN POWER switch (page 14)**
Setting this switch to ON will put the Monitor into standby mode, allowing you to turn on and off the power using the POWER button either on the remote control or on the Monitor.

5 **SPEAKER OUT terminals (page 12)**
Connect external speakers.

6 **INTERNAL/EXTERNAL (built-in speaker/external speaker) selecting switch (page 12)**
INTERNAL: To use built-in speakers.
EXTERNAL: To use external speakers.

7 **REMOTE 2 (JVC CODE) terminals (mini jack) (page 31)**
- IN
  For Master Monitor: Connect a wired remote control to this terminal for serial connection.
  For Slave Monitors: Connect to the REMOTE 2 OUT terminal of another Monitor in serial connection.
- OUT
  Connect to the REMOTE 2 IN terminal of another Monitor for serial connection.



8 **RGB B input/output terminals (page 12)**
- R, G, B, HD/Cs, VD input terminals (BNC)
  Connect these terminals to the following output terminals of a personal computer or other equipment:
  – Analog RGB signal output terminals
  – Horizontal sync (HD) signal or composite (Cs) signal output terminal
  – Vertical sync (VD) signal output terminal

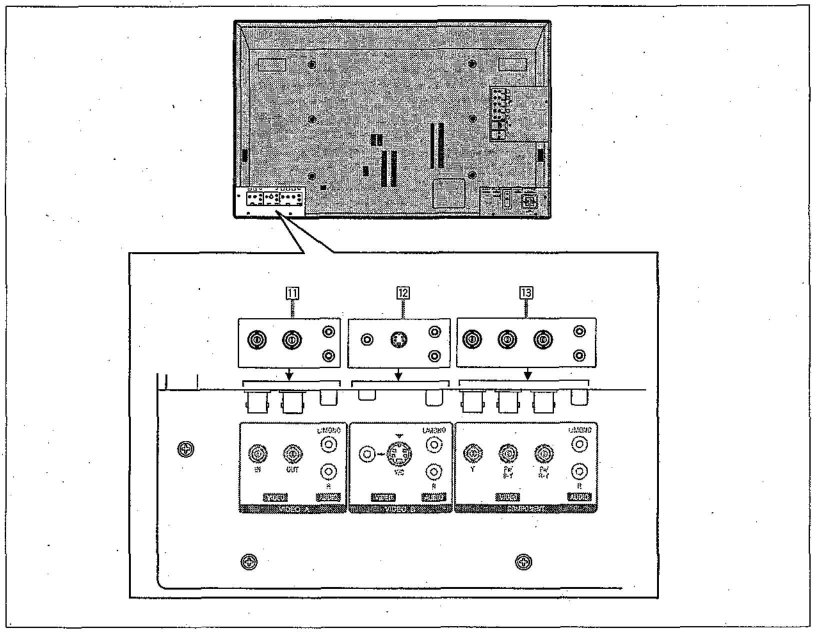
Notes:
- External sync signals are automatically detected when they come in.
- When both horizontal (HD)/vertical (VD) sync and composite (Cs) sync are connected, HD/VD sync signals will be used.

- R, G, B, HD/Cs, VD output terminals (BNC)
  Connect these terminals to the following input terminals of another monitor:
  – Analog RGB signal input terminals
  – Horizontal sync (HD) signal or composite (Cs) signal input terminal
  – Vertical sync (VD) signal input terminal

9 **RGB A input terminal (D-sub, 15-pin) (page 12)**
Connect this terminal to the video output terminal of a personal computer.

10 **AUDIO input terminals (pin jack)**
Connect these terminals to the audio output terminals of a personal computer or other equipment which is also connected to the RGB A or RGB B input terminals.

Parts Identification (Continued)



11 **VIDEO A terminals (page 13)***
- Video input terminal (BNC)
  Connect this terminal to the video output terminal of a VCR, etc.
- Video output terminal (BNC)
  Connect this terminal to the video input terminal of another Monitor.
- Audio input terminals (pin jack)
  Connect these terminals to the audio input terminals of a VCR, etc.

Note:
- Since the video output terminal on this Monitor is loop-though terminals, the devices connected to this video output terminal should be correctly terminated. Otherwise, pictures become abnormally bright.

12 **VIDEO B terminals (page 13)***
- Y/C (S video) input terminal (Y/C terminal)
  Connect this terminal to the S-video output terminal of a VCR, etc.
- Video input terminal (pin jack)
  Connect this terminal to the video output terminal of a VCR, etc.
- Audio input terminals (pin jack)
  Connect these terminals to the audio output terminals of a VCR, etc.

Note:
- When both the video and S-video terminals are connected, the S-video terminal will have priority.

13 **COMPONENT input terminals (page 13)***
- Y, PB/B-Y, PR/R-Y input terminals (BNC)
  Connect these terminals to the component signal output terminals of NTSC or high-vision equipment.
- Audio input terminals (pin jack)
  Connect these terminals to the audio output terminals of the other equipment.

Note:
* GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE do not have the following input terminals – VIDEO A, VIDEO B, and COMPONENT. To input video, S-video, and component signals, you need to install video interface kit (IF-C421P1W), which is separately purchased.

Preparations

Checking the Accessories

The following accessories are included with the Monitor. Check for them. If any item is missing, please contact the dealer where you purchased the Monitor.

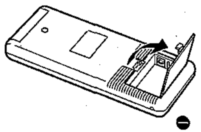
- Remote control (RM-C575) x 1
- Remote control cable x 1
- Power cord x 3 (Use the one matching the wall outlet.)
- Batteries (AA/R6P) x 2

Installing the Batteries

Put the batteries in the remote control as follows. If the remote control has become erratic in operation, change the batteries.

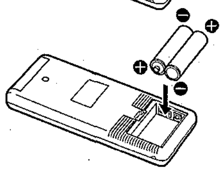
1 Remove the back cover.

While pushing the release lever on the cover, remove the cover in the direction of the arrow.



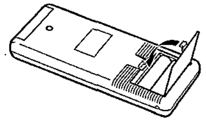
2 Place the batteries.

Put the two supplied batteries (AA/R6P), noting the ⊕ and ⊖ markings, as shown.



3 Replace the back cover as illustrated.

Make sure the release lever on the cover is locked in place correctly.



Precautions for using batteries

If batteries are used improperly, the liquid could leak out, causing a fire, injury, etc. or dirtying the vicinity.
Take notice of the following:
- Do not mix old and new batteries.
- Do not mix different types of battery as different types may have different characteristics.
- Place the batteries according to the ⊕ and ⊖ markings indicated on the battery compartment.
- When installing the batteries, insert the ⊖ end first to avoid a short circuit.
- Use only the specified batteries.
- When you are not using the remote control for a long time, remove the batteries.
- When the batteries have reached the end of their life, replace them with new ones immediately. Otherwise, the liquid may leak out, or malfunction may be caused by the leaked liquid. If the leaked liquid contacts your skin, wipe off the liquid with a soft cloth. If the affected skin is left as is, you may get a rough skin.
- Do not throw the batteries into fire or try recharging them.
- The service life of batteries is six months to one year for normal use. The supplied batteries are only for checking the operation and their life may be shorter. When the remote control operation becomes erratic, replace with new batteries.

The instruction below applies only to the use in Holland.
Gebruike batterijen:

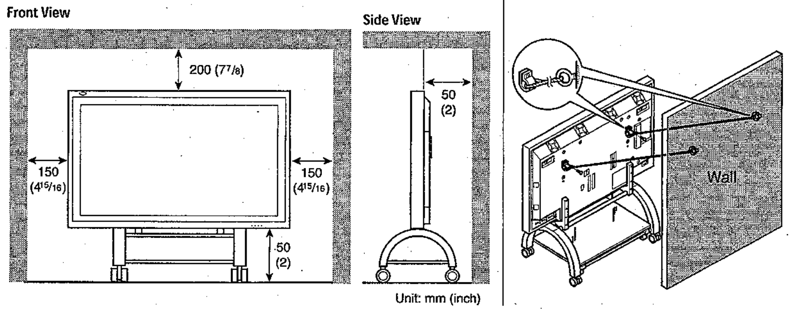
NL Niet weggooien,
maar inleveren
als KCA.

Installation

Precautions

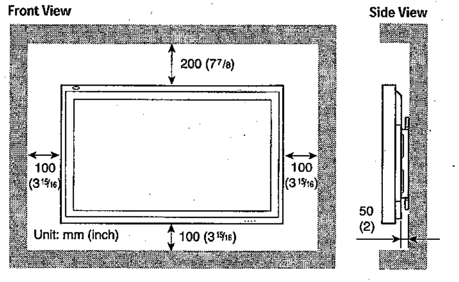
- **When mounting the Monitor vertically, it is necessary to adjust the cooling fan speed to provide better heat dissipation. Do not forget to perform this adjustment. (See page 27.)**
- When installing the Monitor, be sure to use a dedicated Stand Unit, Wall Mounting Unit, or Monitor Hanger Unit, depending on a particular case. Ask your dealer for installation.
- When installing the Monitor, refer also to the user manual for each option to use. Do not tilt the Monitor rightward, leftward, or backward.
- Route the power cord and connection cables along wall or floor corners to avoid walking on them.
- For good heat dissipation, try to leave the following distances of space (minimum) around the Monitor.
- The ambient temperature of the installation place should be within the range of 0°C to 40°C.
- When installing the Monitor in a place, such as near the ceiling, the remote control may not work correctly because of possible effects from the surroundings. If this happens, use the remote control as a wired remote control or move the Monitor where it is free from these effects.

When installing the Monitor on a stand

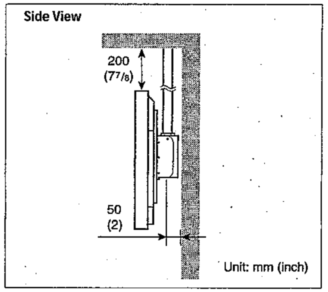


Take measures against the Monitor from overturning:
To protect against abnormal events such as earthquakes and to prevent unexpected accidents, take appropriate measures for preventing the Monitor from overturning; should it overturn, this could lead to personal injury.
For detailed information, refer to the manual supplied for the stand.

When mounting the Monitor on the wall



When hanging the Monitor from the ceiling



Notes:
- Do not allow the same image (pattern) to be continuously displayed on the screen for a long time; otherwise, the area on the screen corresponding to the image may vary in brightness, leaving an afterimage on the screen. To reduce the afterimage, you can use the Refresh function (see page 29).
- The Monitor is manufactured using very high-precision technology, allowing for more than 99.99% active pixels, however, be aware that only a slight number of pixels may be deficient or lit at all times.
- Do not install the Monitor in such a way that the Monitor and other AV equipment affect each other adversely. (For example, if a disturbed image or noise due to electromagnetic interference occurs, or if the infrared remote control malfunctions, change the installation place.)

Connections

Precautions

- Before making connections, turn off all the equipment.
- Plugs should be firmly inserted; poor connection could cause noise.
- To unplug a cord, be sure to grasp its plug and pull it out.
- Connect the power cord after having finished all other connections.
- Refer also to the user manual of each piece of equipment.

Available Signals

Video signals

The following signals can be input to this Monitor:

- VIDEO A and VIDEO B terminals accept — PAL, NTSC, NTSC4.43, and SECAM signals.
- COMPONENT terminals accept — 480i, 576i, 480p, 720p, and 1080i (1035i) signals.

(For GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE, to input the above signals, you need to install the video interface kit (IF-C421P1W), which is separately purchased.)

Computer signals (Preset and user-defined video modes)

This Monitor has 13 preset video modes for the most popular industrial standard (marked with ● in the table below), and the signals of the following image resolutions can be input to the RGB input terminals.
For less common video modes, this Monitor can also display a picture, and memorize the video modes as user-defined video modes (up to five modes).
When a signal other than any of the preset modes is input, it will automatically be stored as a user-defined video mode, and when a sixth user-defined video signal is input, the first mode will be erased from memory.

No.	Signal name	Screen resolution		Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Scan system	Preset setting
		Horizontal	Vertical				
1	PC98	640	400	24.8	56.4	Non-interlace	●
2	VGA400-70	640	400	31.5	70.1	Non-interlace	●
3	VGA480-60	640	480	31.5	59.9	Non-interlace	●
4	VGA480-72	640	480	37.9	72.8	Non-interlace	●
5	VGA480-75	640	480	37.5	75.0	Non-interlace	●
6	MAC13"	640	480	35.0	66.7	Non-interlace	●
7	SVGA-56	800	600	35.2	56.3	Non-interlace	●
8	SVGA-60	800	600	37.9	60.3	Non-interlace	●
9	SVGA-72	800	600	48.1	72.2	Non-interlace	●
10	XGA-60	1024	768	48.4	60.0	Non-interlace	●
11	XGA-70	1024	768	56.5	70.1	Non-interlace	●
12	RGB15K-60	—	—	15.7	59.9	Interlace	●
13	RGB15K-50	—	—	15.6	50.0	Interlace	●
-	User-defined	—	—	15.0 – 16.0	50.0 – 75.0	Interlace	
-	User-defined	—	—	16.0 – 56.0	50.0 – 75.0	Non-interlace	

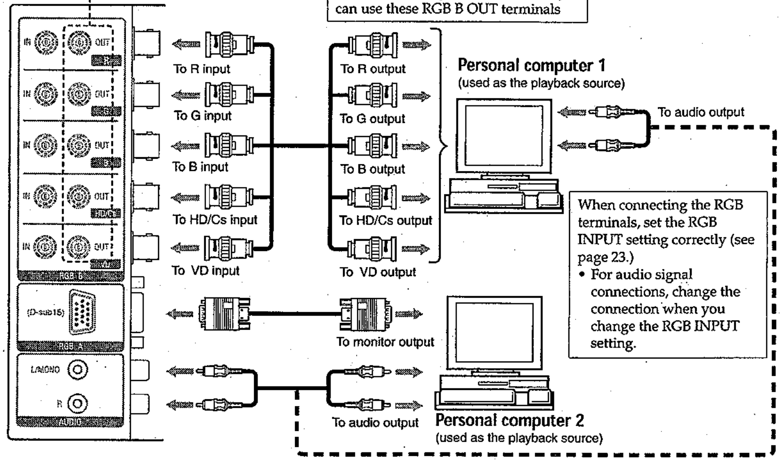
Notes:
- When you are viewing XGA, setting the refresh rate (vertical scan frequency) of your personal computer to 60 Hz will enhance the video image.
- When a signal other than listed above is input, a part of the screen may become void or an unnecessary picture may appear.
- Signals, though they are within the acceptable range of frequencies, may not be displayed normally, depending on the signal type.
- Depending on the connected equipment, the Monitor may not be compatible with composite sync (Cs) or G on sync signals.
- When a preset mode signal is input, the vertical frequency displayed on the screen will have an "*" shown at its right top position.
- When No. 7 to No. 11 signals are input, thin lines may happen to be hard to view on the screen, due to the internal digital processing.

Connections (Continued)

Connection Examples

RGB connections

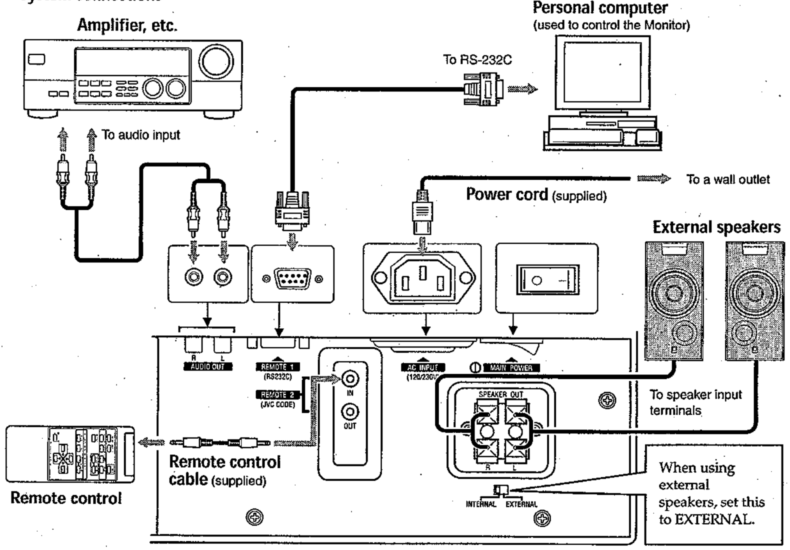
When connecting another Monitor, you can use these RGB B OUT terminals


IN
OUT
RGB B
(D-sub15)
RGB A
L/MONO
R
AUDIO
To R input
To G input
To B input
To HD/Cs input
To VD input
To R output
To G output
To B output
To HD/Cs output
To VD output
Personal computer 1
(used as the playback source)
To audio output
To monitor output
To audio output
Personal computer 2
(used as the playback source)

When connecting the RGB terminals, set the RGB INPUT setting correctly (see page 23.)

- For audio signal connections, change the connection when you change the RGB INPUT setting.

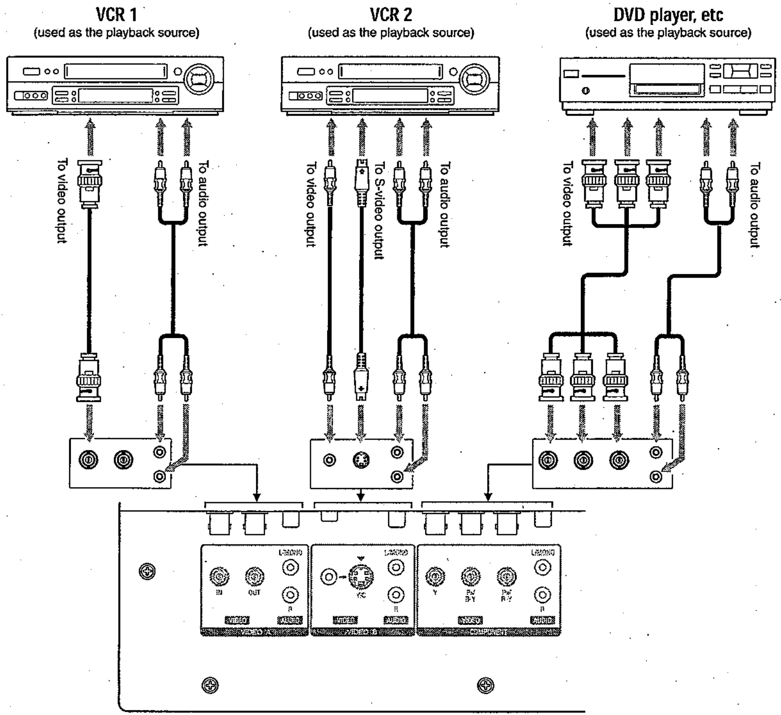
System connections


Amplifier, etc.
To audio input
Personal computer
(used to control the Monitor)
To RS-232C
Power cord (supplied)
To a wall outlet
External speakers
R
L
AUDIO OUT
REMOTE 1
(RS232C)
REMOTE 2
(JVC CODE)
IN
OUT
AC INPUT
(120/230V~)
MAIN POWER
SPEAKER OUT
To speaker input terminals
INTERNAL
EXTERNAL
Remote control cable (supplied)
Remote control

When using external speakers, set this to EXTERNAL.

AV connections

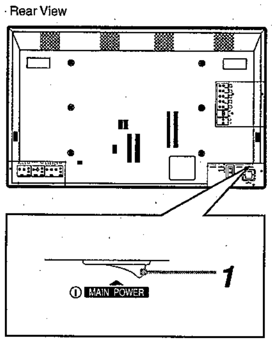
These terminals are not available for GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE.
To use them, you need to install video interface kit (IF-C421P1W), which is separately purchased.

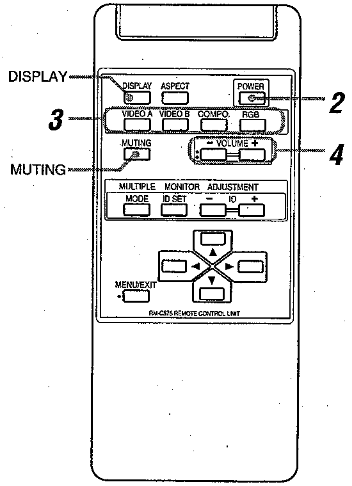

VCR 1
(used as the playback source)
VCR 2
(used as the playback source)
DVD player, etc
(used as the playback source)
To video output
To audio output
To video output
To S-video output
To audio output
To video output
To audio output
L/MONO
IN
OUT
R
VIDEO
AUDIO
VIDEO A
Y/C
VIDEO B
Y
PB/B-Y
PR/R-Y
COMPONENT

Notes:

- You can connect another VCR or Monitor to the VIDEO A OUT terminal. However, when connecting a VCR to the VIDEO A terminals, do not connect both IN and OUT terminals to the same VCR.
- When connecting a VCR to the VIDEO B terminals, you can use either the video or S-video terminals. If the both terminals are used, S-video terminal will have priority.

Basic Operations





Daily Operations

1 Turn on the main power.

Set MAIN POWER on the back of the Monitor to ON.
The POWER lamp on the upper left of the front panel glows orange.

2 Turn on the power.

Press POWER on the remote control to turn the power on.
The POWER lamp changes to glow green.

- You can also use the POWER on the front panel (lower right) to turn on the Monitor.

3 Select an input.

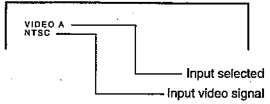
Select the desired input by pressing VIDEO A, VIDEO B, COMPO. or RGB.

- You can also select the input by pressing INPUT on the Monitor. Each time you press the button, the input mode changes in sequence.

VIDEO A → VIDEO B
↑ ↓
RGB A or RGB B ← COMPO.

- Only for GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE: You can only select RGB.*

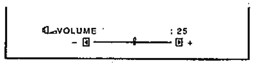
Ex. When selecting "VIDEO A" input



Note:

- This Monitor has two RGB input terminals — RGB A and RGB B.
  When you select the RGB input, the one set on the menu (RGB INPUT: see page 23) is selected as the input source.
  If you want to select the other RGB input than the current one, change the RGB INPUT setting on the menu.

4 Adjust the volume.



Notes:

- While no menu is displayed, you can adjust the volume by pressing ◄ / ► on the Monitor.
- When the INTERNAL/EXTERNAL selecting switch on the back of the Monitor is set to EXTERNAL, no sounds come out of the built-in speakers.
  When you want to hear audio sound from the built-in speakers, set the INTERNAL/EXTERNAL selecting switch to INTERNAL.

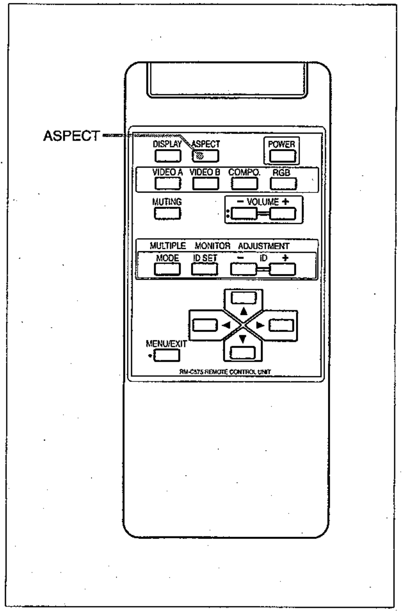
To turn off the volume immediately

Press MUTING.
"MUTING ON" is displayed, and the sound goes out.
Pressing the button again resumes the previous volume level.

To make the screen indication appear

Press DISPLAY.
The types of input and signal are indicated on the screen for about 3 seconds.
You can also make the screen indication appear using menus (page 24).

Changing the Aspect Ratio



Precautions for using the screen mode switching function

- This Monitor features a screen mode switching (aspect ratio change) function. If you select a mode different in aspect ratio from software such as TV programs, the picture may look different from original picture. Be aware of this point when you are selecting a screen mode.
- If you select a wide screen mode while viewing conventional video programs of the aspect ratio 4:3, some portions (edges) of the original picture will be cut off, or deformed. To enjoy the original picture as it is, select "REGULAR" while viewing such programs.
- If you place the Monitor in a tea room, hotel, etc. for business purposes or public viewing and modify the picture by using the screen mode switching (aspect ratio change) function, this could violate the copyright protected by the copyright law, which requires your special attention.
- If you make the screen very bright and watch programs selecting "REGULAR" for a long period of time, the Monitor screen may happen to be burned in. If this occurs, watching programs using a wide screen mode for a while will reduce the burn-in gradually.

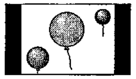
With this Monitor, you can select among three types of wide screens (FULL, ZOOM, and PANORAMIC) in addition to the REGULAR screen of conventional 4:3 aspect ratio.

Press ASPECT to select the screen size

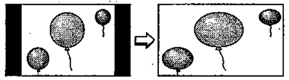
Each time you press the button, the screen size changes as follows:

→ REGULAR → FULL
PANORAMIC ← ZOOM ←

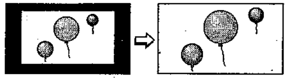
REGULAR: Displays at conventional 4:3 aspect ratio.



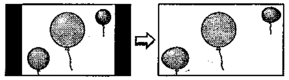
FULL: REGULAR size display is enlarged horizontally.



ZOOM: REGULAR size display is enlarged vertically and horizontally at the same ratio.



PANORAMIC: REGULAR size display is enlarged horizontally to the extent that the picture does not look abnormally.



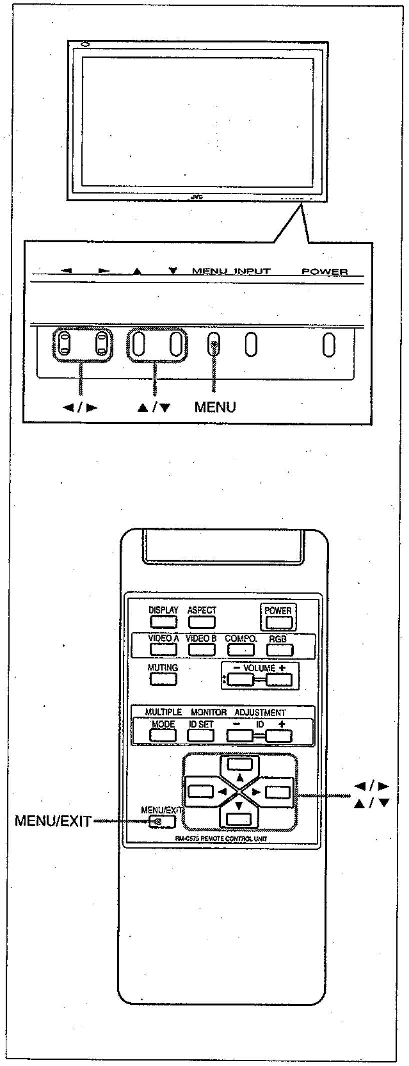
Notes:

- When one of the following signals is being input, you cannot select the aspect ratio you want.
  - ■ *1080i, 1035i or 720p signal through the COMPONENT input terminals*
    You can only select FULL.
  - ■ *480p signal through the COMPONENT input terminals*
    You cannot select PANORAMIC.
  - ■ *When any signal other than RGB15K-60 and RGB15K-50 through the RGB input terminals*
    You can select only REGULAR and FULL.
- The aspect ratio can also be changed on the Function Selection Menu (page 21).

---

* Only for GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE: You need to install the video interface kit (IF-C421P1W), which is separately purchased, to reproduce input images for VIDEO A, VIDEO B, and COMPONENT.

Video Adjustments



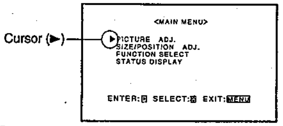
For video adjustments, use menus.
You can use the buttons either on the remote control or on Monitor for menu operations.

- Refer also to "Menu Classifications" on pages 33 and 35.

Adjusting the Picture Quality

Picture quality can be set for each input mode.

1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**

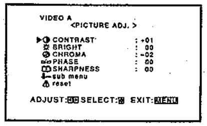


```
<MAIN MENU>
►PICTURE   ADJ.
 SIZE/POSITION   ADJ.
 FUNCTION SELECT
 STATUS DISPLAY

ENTER:▣ SELECT:▣ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "PICTURE ADJ."**

3 **Press ► to display the Picture Adjustment Menu.**



```
VIDEO A
      <PICTURE ADJ. >
►◑ CONTRAST    : +01
 ☼ BRIGHT      :  00
 ❂ CHROMA      : -02
   PHASE       :  00
   SHARPNESS   :  00
 ┿ sub menu
   reset
ADJUST:▣▣SELECT:▣  EXIT:MENU
```

4 **Press ▲/▼ to move the cursor (►) to the item you want to adjust.**

Item	Adjustment range	Standard (Reset)
◑ CONTRAST	–20 to +20	+10
☼ BRIGHT (brightness)	–20 to +20	0
❂ CHROMA*	–20 to +20	0
PHASE**	–20 to +20	0
SHARPNESS	–20 to +20	0
┿ sub menu	See "To make an adjustment while viewing the adjustment bar" on the next page.	
↶ reset	See "To reset the adjustments" on the next page.	

* Adjustment is not possible when RGB input is selected.
** Adjustment is only possible when viewing NTSC signal through the VIDEO A or B terminal.

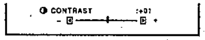
5 **Press ◄/► to make adjustments.**

6 **Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.**

To make an adjustment while viewing the adjustment bar

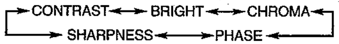
After step 3 on page 16, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "sub menu."**
2 **Press ► to display the Sub Menu.**
The Sub Menu for CONTRAST appears on the screen.



```
◑ CONTRAST          :+01
 - ▣──────┼──────▣ +
```

3 **Press ▲/▼ to select the Sub Menu you want to adjust.**
Each time you press the button, the Sub Menu changes as follows:

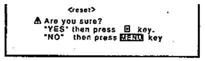


4 **Press ◄/► to adjust the selected item.**
5 **Repeat steps 3 and 4 to adjust the other items.**
6 **Press MENU/EXIT (or MENU on the Monitor) three times to exit from the menu operations.**

To reset the adjustments

After step 3 on page 16, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "reset."**
2 **Press ►.**
The confirmation screen appears.



```
      <reset>
⚠ Are you sure?
  "YES" then press  ▣  key.
  "NO"  then press MENU key
```

3 **Press ► again to reset the adjustments.**

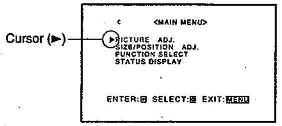
To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

Adjusting the Screen Size and Position

The screen size and position can be adjusted.
Adjusted settings can be stored for each signal type; therefore, when the same signal comes in, the stored settings are recalled.

- When adjusting the size, the size cannot be adjusted proportionally, but can be enlarged rightward (or downward) only and reduced leftward (or upward) only. Therefore, it is necessary to adjust both the size and position alternately to adjust to the appropriate size.

1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**

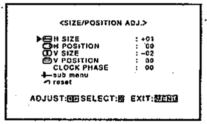


```
<          <MAIN MENU>
►PICTURE   ADJ.
 SIZE/POSITION   ADJ.
 FUNCTION SELECT
 STATUS DISPLAY

ENTER:▣ SELECT:▣ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "SIZE/POSITION ADJ."**

3 **Press ► to display the Size/Position Adjustment Menu.**



```
      <SIZE/POSITION ADJ.>
► H SIZE          : +01
  H POSITION      :  00
  V SIZE          : -02
  V POSITION      :  00
    CLOCK PHASE   :  00
 ┿ sub menu
 ↶ reset
ADJUST:▣▣SELECT:▣  EXIT:MENU
```

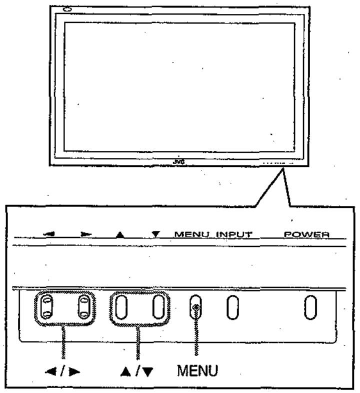
4 **Press ▲/▼ to move the cursor (►) to the item you want to adjust.**

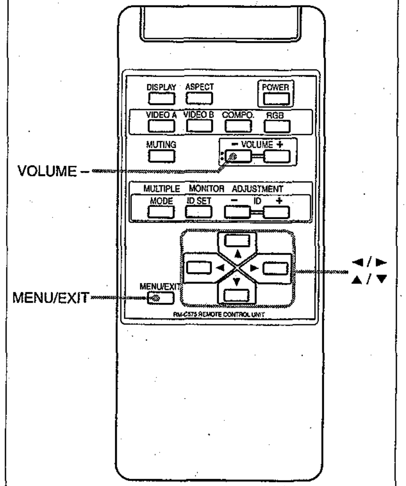
Item	Adjustment range
H (horizontal) SIZE	–80 to +80
H POSITION	–80 to +80
V (vertical) SIZE	–80 to +80
V POSITION	–80 to +80
CLOCK PHASE*	–20 to +20
┿ sub menu	See "To make an adjustment while viewing the adjustment bar" on the next page.
↶ reset	See "To reset the adjustments" on the next page.

* CLOCK PHASE can be used, while RGB input is selected, to reduce flickering and blurring on the screen after adjusting the screen size.

(To be continued on the next page)

Video Adjustments (Continued)





5 **Press ◄/► to adjust the selected item.**

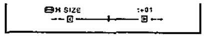
6 **Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.**

To make an adjustment while viewing the adjustment bar

After step 3 on page 17, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "sub menu."**

2 **Press ► to display the Sub Menu.**
The Sub Menu for H SIZE appears on the screen.



3 **Press ▲/▼ to select the Sub Menu you want to adjust.**
Each time you press the button, the Sub Menu changes as follows:

→ H SIZE ←→ H POSITION ←→ V SIZE ←
→ CLOCK PHASE ←→ V POSITION ←

4 **Press ◄/► to adjust the selected item.**

5 **Repeat steps 3 and 4 to adjust the other items.**

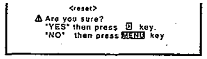
6 **Press MENU/EXIT (or MENU on the Monitor) three times to exit from the menu operations.**

To reset the adjustments

After step 3 on page 17, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "reset."**

2 **Press ►.**
The confirmation screen appears.



<reset>
⚠ Are you sure?
"YES" then press ► key.
"NO" then press MENU key

3 **Press ► again to reset the adjustments.**

To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

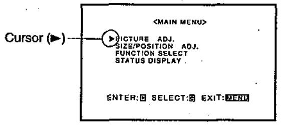
Note:

- Adjustment values for both horizontal and vertical sizes of the screen are so related that if one is adjusted up to near the maximum value, the attainable value of the other will be decreased.

Adjusting the Color Temperature

The adjusted setting applies to all inputs.

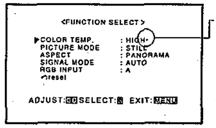
1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**



<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:► SELECT:▲▼ EXIT:MENU

2 **Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."**

3 **Press ► to display the Function Selection Menu.**



<FUNCTION SELECT>
►COLOR TEMP. : HIGH*
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU

" * " appears only when you have adjusted the White Balance (see the right column).

4 **Press ▲/▼ to move the cursor (►) to "COLOR TEMP."**

5 **Press ◄/► to make an adjustment.**

Each time you press the button, the color temperature alternates between "HIGH" and "LOW."

HIGH:	To make the screen become bluish.
LOW:	To make the screen become reddish.

6 **Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.**

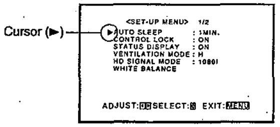
Note:

- To make a fine adjustment, adjust "WHITE BALANCE" (see the right column).

Adjusting the White Balance

G GAIN, B GAIN and R GAIN can be finely adjusted separately for "HIGH" and "LOW" settings of the color temperature.
When using plural numbers of the Monitors, this can be useful to have the same color on each screen.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.
On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

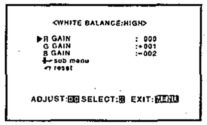


<SET-UP MENU> 1/2
►AUTO SLEEP : 1MIN.
CONTROL LOCK : ON
STATUS DISPLAY : ON
VENTILATION MODE : H
HD SIGNAL MODE : 1080I
WHITE BALANCE
ADJUST:◄► SELECT:▲▼ EXIT:MENU

2 **Press ▲/▼ to move the cursor (►) to "WHITE BALANCE."**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 **Press ► to display the White Balance Adjustment Menu.**



<WHITE BALANCE:HIGH>
►R GAIN : 000
G GAIN :+001
B GAIN :−002
sub menu
reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU

4 **Press ▲/▼ to move the cursor (►) to the item you want to adjust.**

5 **Press ◄/► to adjust the selected item.**

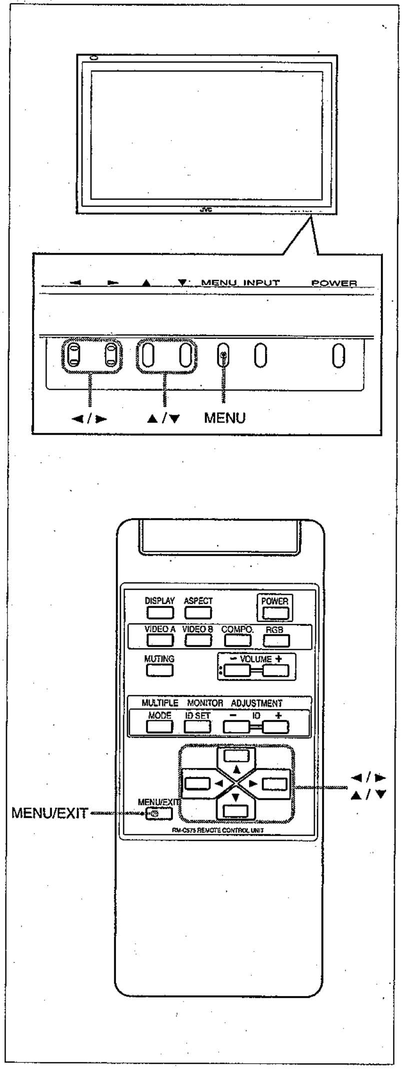
6 **Repeat steps 4 and 5 to adjust the other items.**

7 **Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.**

Notes:

- Adjustable range will vary among the Monitors.
- "MAX" may appear soon after you begin adjustment. This is normal but not a malfunction.

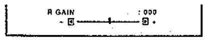
Video Adjustments (Continued)


JVC
◄
►
▲
▼
MENU
INPUT
POWER
◄/►
▲/▼
MENU
DISPLAY
ASPECT
POWER
VIDEO A
VIDEO B
COMPO.
RGB
MUTING
– VOLUME +
MULTIPLE MONITOR ADJUSTMENT
MODE
ID SET
– ID +
MENU/EXIT
◄/►
▲/▼
MENU/EXIT
RM-C575 REMOTE CONTROL UNIT

To make an adjustment while viewing the adjustment bars

After step 3 on page 19, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "sub menu."**
2 **Press ► to display the Sub Menu.**
The Sub Menu for R GAIN appears on the screen.



3 **Press ▲/▼ to select the Sub Menu you want to adjust.**
Each time you press the button, the Sub Menu changes as follows:

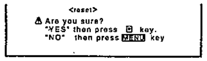
→ R GAIN ←→ G GAIN ←
→ B GAIN ←

4 **Press ◄/► to adjust the selected item.**
5 **Repeat steps 3 and 4 to adjust the other items.**
6 **Press MENU/EXIT (or MENU on the Monitor) three times to exit from the menu operations.**

To reset the adjustments

After step 3 on page 19, proceed as follows:

1 **Press ▲/▼ to move the cursor (►) to "reset."**
2 **Press ►.**
The confirmation screen appears.



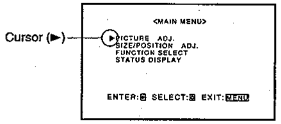
<reset>
⚠ Are you sure?
"YES" then press ► key.
"NO" then press MENU key

3 **Press ► again to reset the adjustments.**
To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

Changing the Picture Mode

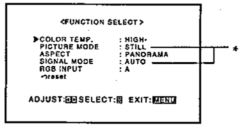
When one of the following signals comes in through the RGB terminals — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60, you can select the picture mode suited to either still pictures or moving pictures.

1 Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.


Cursor (►)
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:► SELECT:▲▼ EXIT:MENU

2 Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."

3 Press ► to display the Function Selection Menu.


<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
↩reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU
*

* "PICTURE MODE" and "SIGNAL MODE" do not appear at the same time.
"PICTURE MODE" appears when RGB input is selected, and one of the following signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. On the other hand, "SIGNAL MODE" appears when VIDEO A, VIDEO B, or COMP. (component) input is selected.

4 Press ▲/▼ to move the cursor (►) to "PICTURE MODE."

5 Press ◄/► to select the picture mode you want.

Each time you press the button, the picture mode alternates between "STILL" and "MOVING."
Selects the picture quality suited to either the still picture or the moving picture.

STILL:	When showing the still pictures mainly on the screen.
MOVING:	When showing the moving pictures mainly on the screen.

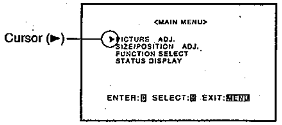
6 Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.

Changing the Aspect Ratio

The setting adjusted applies to all inputs.

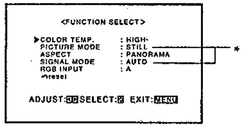
- You can change the aspect ratio by pressing ASPECT. (See page 15.)

1 Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.


Cursor (►)
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:► SELECT:▲▼ EXIT:MENU

2 Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."

3 Press ► to display the Function Selection Menu.


<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
↩reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU
*

* "PICTURE MODE" and "SIGNAL MODE" do not appear at the same time.
"PICTURE MODE" appears when RGB input is selected, and one of the following signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. On the other hand, "SIGNAL MODE" appears when VIDEO A, VIDEO B, or COMP. (component) input is selected.

4 Press ▲/▼ to move the cursor (►) to "ASPECT."

5 Press ◄/► to select an aspect ratio you want.

Each time you press the button, the aspect ratio changes as follows:

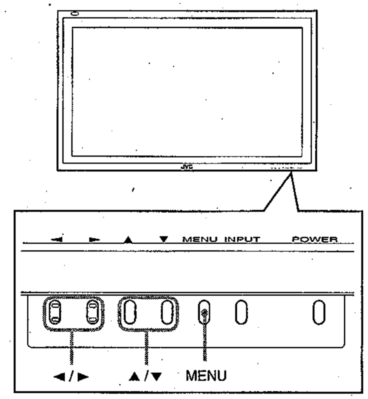
→ REGULAR ←→ FULL ←
→ PANORAMIC ←→ ZOOM ←

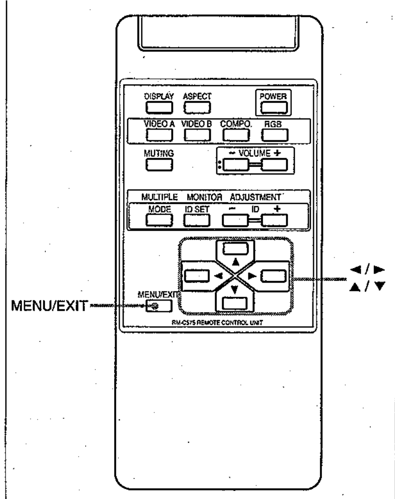
* For detailed information on these aspect ratios, see page 15.

6 Press MENU/EXIT (or MENU on the Monitor) twice to exit from the menu operations.

Note:

- When one of the following signals is being input, you cannot select the aspect ratio you want.
  - ■ *1080i, 1035i or 720p signal through the COMPONENT input terminals*
    You can only select FULL.
  - ■ *480p signal through the COMPONENT input terminals*
    You cannot select PANORAMIC.
  - ■ *When any signal other than RGB15K-60 and RGB15K-50 through the RGB input terminals*
    You can select only REGULAR and FULL.

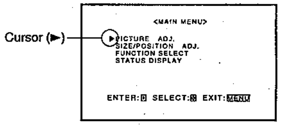

JVC
◄ ► ▲ ▼ MENU INPUT POWER
◄/►
▲/▼
MENU


DISPLAY
ASPECT
POWER
VIDEO A
VIDEO B
COMPO.
RGB
MUTING
– VOLUME +
MULTIPLE MONITOR ADJUSTMENT
MODE
ID SET
– ID +
MENU/EXIT
RM-C575 REMOTE CONTROL UNIT
MENU/EXIT
◄/►
▲/▼

Setting the Receivable Signal Types

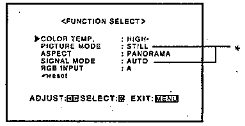
You can set the receivable signal types. Normally, select "AUTO."
A common setting will apply to both VIDEO A and B terminals, and a different setting will apply to the COMPONENT terminals.

1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**


Cursor (►)
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:▶ SELECT:▲▼ EXIT:MENU

2 **Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."**

3 **Press ► to display the Function Selection Menu.**


<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
↵reset
*
ADJUST:◄► SELECT:▲▼ EXIT:MENU

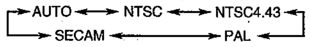
* "PICTURE MODE" and "SIGNAL MODE" do not appear at the same time.
"PICTURE MODE" appears when RGB input is selected, and one of the following signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. On the other hand, "SIGNAL MODE" appears when VIDEO A, VIDEO B, or COMP. (component) input is selected.

4 **Press ▲/▼ to move the cursor (►) to "SIGNAL MODE."**

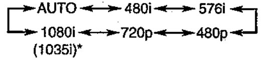
5 **Press ◄/► to select the receivable video signal type.**

Each time you press the button, the receivable video signal type changes as follows:

- When VIDEO A or VIDEO B input is selected:


AUTO
NTSC
NTSC4.43
SECAM
PAL

- When COMPONENT input is selected:


AUTO
480i
576i
1080i
(1035i)*
720p
480p

* Changes according to the "HD SIGNAL MODE" setting (see page 27).

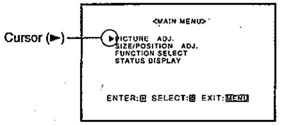
6 **Press MENU/EXIT (or MENU on the Monitor) twice to exit the menu operations.**

Setting the RGB Input

After connecting the playback device such as a PC to the RGB terminals, you have to specify which terminal you have connected the device to — RGB A (D-sub 15 pin) or RGB B (BNC) input.

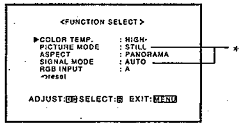
- Without setting the RGB input correctly, you cannot show any picture though you select the RGB input.

1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**


Cursor (►)
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:▶ SELECT:▲▼ EXIT:MENU

2 **Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."**

3 **Press ► to display the Function Selection Menu.**


<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
↵reset
*
ADJUST:◄► SELECT:▲▼ EXIT:MENU

* "PICTURE MODE" and "SIGNAL MODE" do not appear at the same time.
"PICTURE MODE" appears when RGB input is selected, and one of the following signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. On the other hand, "SIGNAL MODE" appears when VIDEO A, VIDEO B, or COMP. (component) input is selected.

4 **Press ▲/▼ to move the cursor (►) to "RGB INPUT."**

5 **Press ◄/► to select the correct RGB terminal you use.**

Each time you press the button, the RGB input alternates between "A" and "B."

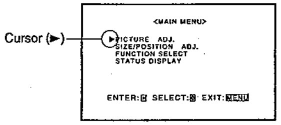
A: When connecting the playback device to the RGB A terminal (D-sub 15).
B: When connecting the playback device to the RGB B IN terminal (BNC).

6 **Press MENU/EXIT (or MENU on the Monitor) twice to exit the menu operations.**

Resetting the Function Selection Menu Settings

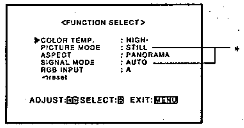
You can reset all the Function Selection Menu settings at a time.

1 **Press MENU/EXIT (or MENU on the Monitor) to display the Main Menu.**


Cursor (►)
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:▶ SELECT:▲▼ EXIT:MENU

2 **Press ▲/▼ to move the cursor (►) to "FUNCTION SELECT."**

3 **Press ► to display the Function Selection Menu.**

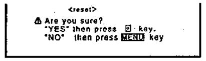

<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
↵reset
*
ADJUST:◄► SELECT:▲▼ EXIT:MENU

* "PICTURE MODE" and "SIGNAL MODE" do not appear at the same time.
"PICTURE MODE" appears when RGB input is selected, and one of the following signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. On the other hand, "SIGNAL MODE" appears when VIDEO A, VIDEO B, or COMP. (component) input is selected.

4 **Press ▲/▼ to move the cursor (►) to "reset."**

5 **Press ►.**

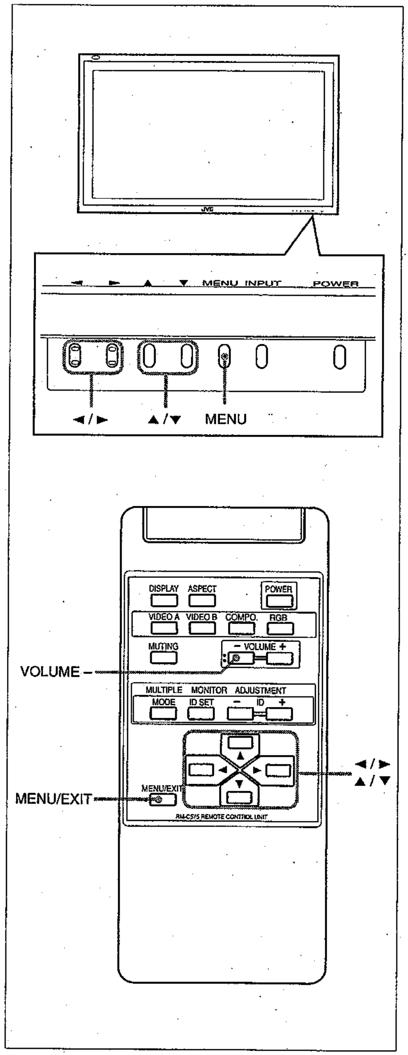
The confirmation screen appears.


<reset>
⚠ Are you sure?
"YES" then press ▶ key.
"NO" then press MENU key

6 **Press ► again to reset the adjustments.**

To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

Other Convenient Functions



To set the other convenient functions, use menus.
You can use the buttons either on the remote control or on Monitor for menu operations.

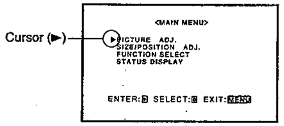
- Refer also to "Menu Classifications" on pages 33 and 35.

Showing On-screen Display

The input mode and signal type will be indicated on the screen.

- The following procedure can be done by using the buttons on the Monitor. You can also show these information by pressing DISPLAY on the remote control. (See page 14.)

1 Press MENU (or MENU/EXIT on the remote control) to display the Main Menu.



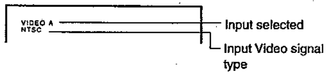
```
<MAIN MENU>
►PICTURE ADJ.
 SIZE/POSITION ADJ.
 FUNCTION SELECT
 STATUS DISPLAY

ENTER:▶ SELECT:◆ EXIT:MENU
```

2 Press ▲/▼ to move the cursor (►) to "STATUS DISPLAY."

3 Press ► to display the current input terminal and received signal type.

Ex. When selecting "VIDEO A" input

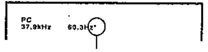


```
VIDEO A
NTSC
```

Ex. When selecting "COMPONENT" input

```
COMPONENT
480i
```

Ex. When selecting "RGB" input



```
PC
37.9kHz    60.3Hz*
```

When the signal being input is a preset video mode, an "*" will be shown after the frequency.

Note:

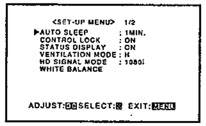
- If you want to make these information appear automatically when you change the input mode, see "Showing the On-screen When Changing the Input Mode" on page 26.

Confirming the Use Time

You can confirm the hours of use on the Setup Menu.
This may be necessary when you ask for any service.

1 <u>On the remote control:</u>
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

<u>On the Monitor:</u>
Press MENU while holding ◄ to display the Setup Menu.

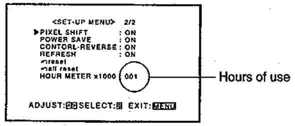


```
<SET-UP MENU>  1/2
►AUTO SLEEP      : 1MIN.
 CONTROL LOCK    : ON
 STATUS DISPLAY  : ON
 VENTILATION MODE: H
 HD SIGNAL MODE  : 1080i
 WHITE BALANCE

ADJUST:◀▶SELECT:◆ EXIT:MENU
```

2 Keep pressing ▲/▼ until the second page of the Setup Menu appears.

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.



```
<SET-UP MENU>  2/2
►PIXEL SHIFT     : ON
 POWER SAVE      : ON
 CONTORL-REVERSE : ON
 REFRESH         : ON
 →reset
 →all reset
 HOUR METER x1000 001

ADJUST:◀▶SELECT:◆ EXIT:MENU
```

3 Confirm the hour of use.

- The displayed value for the hours of use is divided by 100. To calculate the actual hours of use, multiply the displayed value by 100.

4 Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.

Notes:

- The value for the hours of use is added by one hour unit. If you use the monitor within one hour, it will not be added to the hours of use.
- The period when the monitor is on standby (the power lamp glows orange) will not be added to the hours of use.

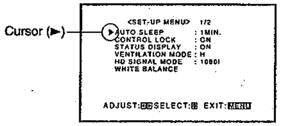
Setting the Auto Sleep Function

This function allows you to turn off (into standby mode) automatically when no signal comes in for a certain period of time.

- The power lamp flashes (orange) while in the Sleep mode (standby).
- When signals come in while in the Sleep mode, the Monitor turns on (the power lamp glows green).

1 <u>On the remote control:</u>
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

<u>On the Monitor:</u>
Press MENU while holding ◄ to display the Setup Menu.



```
<SET-UP MENU>  1/2
►AUTO SLEEP      : 1MIN.
 CONTROL LOCK    : ON
 STATUS DISPLAY  : ON
 VENTILATION MODE: H
 HD SIGNAL MODE  : 1080i
 WHITE BALANCE

ADJUST:◀▶SELECT:◆ EXIT:MENU
```

2 Press ▲/▼ to move the cursor (►) to "AUTO SLEEP."

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 Press ◄/► to select the desired amount of time.

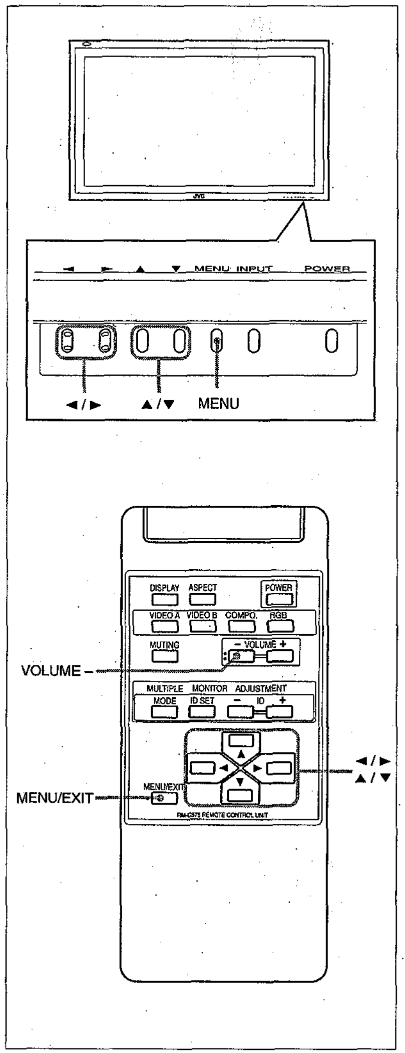
Select the number of minutes before the Monitor goes into standby mode after the signal has ceased to be supplied.
Each time you press the button, the amount of time changes as follows:

OFF◄►1 MIN.◄►2 MIN.◄►3 MIN.◄►4 MIN.◄►5 MIN.

To cancel the Auto Sleep function, select "OFF."

4 Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.

Other Convenient Functions (Continued)



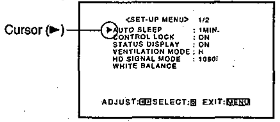
Prohibiting the Monitor's Button Operations

This function allows you to prohibit the button operations on the Monitor to prevent malfunction or avoid tampering.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

Cursor (►)



```
<SET-UP MENU>  1/2
►AUTO SLEEP       : 1MIN.
 CONTROL LOCK     : ON
 STATUS DISPLAY   : ON
 VENTILATION MODE : H
 HD SIGNAL MODE   : 1080i
 WHITE BALANCE

ADJUST:◄►SELECT:■ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "CONTROL LOCK."**
- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 **Press ◄/► to select the desired setting.**
Each time you press the button, the Control Lock function alternates between "ON" and "OFF."
To cancel the Control Lock function, select "OFF."

4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

Note:
- Even when the Control Lock function is in use, the following operations are possible:
  - Operation to cancel the Control Lock function
  - All operations from the remote control

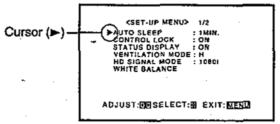
Showing the On-screen When Changing the Input Mode

With this function, you can see the selected input mode and signal type when changing the input mode.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

Cursor (►)



```
<SET-UP MENU>  1/2
►AUTO SLEEP       : 1MIN.
 CONTROL LOCK     : ON
 STATUS DISPLAY   : ON
 VENTILATION MODE : H
 HD SIGNAL MODE   : 1080i
 WHITE BALANCE

ADJUST:◄►SELECT:■ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "STATUS DISPLAY."**
- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 **Press ◄/► to select the desired setting.**
Each time you press the button, the Status Display function alternates between "ON" and "OFF."
To cancel the Status Display function, select "OFF."

4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

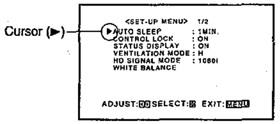
Mounting the Monitor Vertically

When mounting the Monitor vertically, the temperature inside the Monitor rises more than it is mounted horizontally. To provide better heat dissipation, it is necessary to perform the adjustment to switch fan speeds.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

Cursor (►)



```
<SET-UP MENU>  1/2
►AUTO SLEEP       : 1MIN.
 CONTROL LOCK     : ON
 STATUS DISPLAY   : ON
 VENTILATION MODE : H
 HD SIGNAL MODE   : 1080i
 WHITE BALANCE

ADJUST:◄►SELECT:■ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "VENTILATION MODE."**
- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 **Press ◄/► to select "V."**
Each time you press the button, the Ventilation Mode alternates between "H (horizontal mounting)" and "V (vertical mounting)."

4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

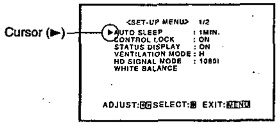
Setting the High-Definition Signal Types

You can select one of the High-Definition (HD) signal types through the COMPONENT terminals — 1080i or 1035i. Normally set it to "1080i."

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

Cursor (►)



```
<SET-UP MENU>  1/2
►AUTO SLEEP       : 1MIN.
 CONTROL LOCK     : ON
 STATUS DISPLAY   : ON
 VENTILATION MODE : H
 HD SIGNAL MODE   : 1080i
 WHITE BALANCE

ADJUST:◄►SELECT:■ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "HD SIGNAL MODE."**
- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

3 **Press ◄/► to select the desired setting.**
Each time you press the button, the HD signal type alternates between "1080i" and "1035i."
- You can select either "1080i" and "1035i" according to the HD signal you input — whichever gives you proportionally shaped pictures.

4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations**

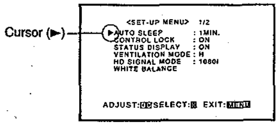
Using the Pixel Shift Function

This function periodically shift the position (pixels) of the displayed picture on the screen so that you can avoid the screen from being burned in.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

Cursor (►)

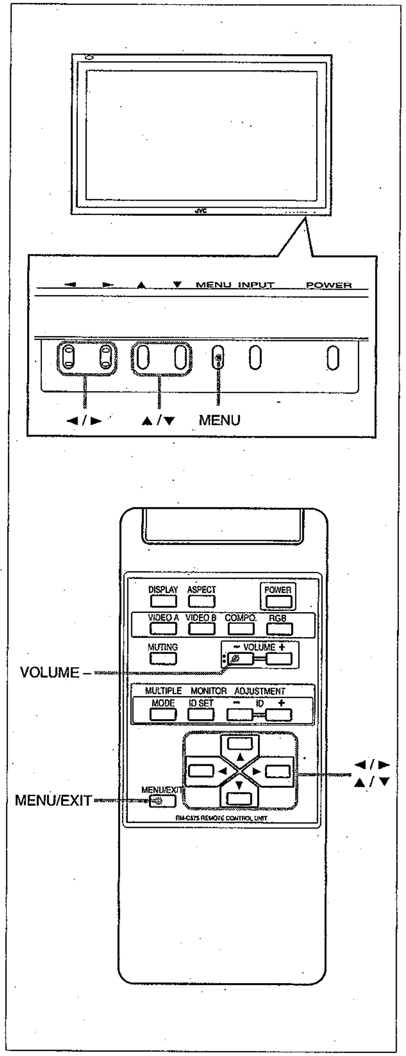


```
<SET-UP MENU>  1/2
►AUTO SLEEP       : 1MIN.
 CONTROL LOCK     : ON
 STATUS DISPLAY   : ON
 VENTILATION MODE : H
 HD SIGNAL MODE   : 1080i
 WHITE BALANCE

ADJUST:◄►SELECT:■ EXIT:MENU
```

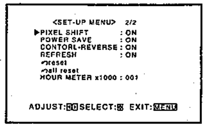
(To be continued on the next page)

Other Convenient Functions (Continued)



2 **Press ▲/▼ to move the cursor (►) to "PIXEL SHIFT" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.



```
<SET-UP MENU>    2/2
►PIXEL SHIFT       : ON
 POWER SAVE        : ON
 CONTORL-REVERSE   : ON
 REFRESH           : ON
 ↵reset
 ↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

3 **Press ◄/► to select the desired setting.**

Each time you press the button, the Pixel Shift function alternates between "ON" and "OFF."

To cancel the Pixel Shift function, select "OFF."

4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

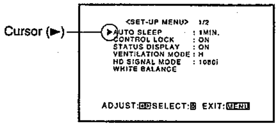
Using the Power Save Function

You can use this function to reduce the electrical consumption and to extend the lifetime of the Monitor's screen.

- The brightness of the screen will be reduced.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.



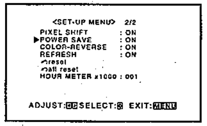
Cursor (►)

```
<SET-UP MENU>    1/2
►AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080i
 WHITE BALANCE

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "POWER SAVE" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.



```
<SET-UP MENU>    2/2
 PIXEL SHIFT       : ON
►POWER SAVE        : ON
 COLOR-REVERSE     : ON
 REFRESH           : ON
 ↵reset
 ↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

3 **Press ◄/► to select the desired setting.**

Each time you press the button, the Power Save function alternates between "ON" and "OFF."

To cancel the Power Save function, select "OFF."

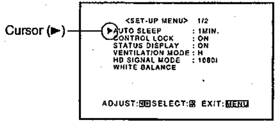
4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

Preventing the Afterimage Effect

After showing the same still picture on the screen, reverse the color on the screen using this function so that you can avoid the screen from being burned in with the still picture.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.



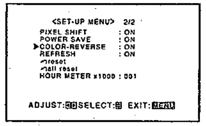
Cursor (►)

```
<SET-UP MENU>    1/2
►AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080i
 WHITE BALANCE

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "COLOR-REVERSE" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.



```
<SET-UP MENU>    2/2
 PIXEL SHIFT       : ON
 POWER SAVE        : ON
►COLOR-REVERSE     : ON
 REFRESH           : ON
 ↵reset
 ↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

3 **Press ◄/► to select "ON" while showing the still picture so that you can avoid the screen from being burned in with the still picture.**

Each time you press the button, the Color-Reverse function alternates between "ON" and "OFF."

To cancel the Color-Reverse function, select "OFF."

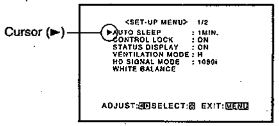
4 **Press MENU/EXIT (or MENU on the Monitor) once to exit from the menu operations.**

Refreshing the Screen

After the power is turned off, a whitish image may be left on the screen. In that case, leave the monitor in a white back state for a while, and the image will disappear.

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.



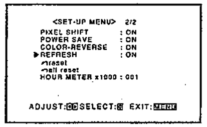
Cursor (►)

```
<SET-UP MENU>    1/2
►AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080i
 WHITE BALANCE

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "REFRESH" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.



```
<SET-UP MENU>    2/2
 PIXEL SHIFT       : ON
 POWER SAVE        : ON
 COLOR-REVERSE     : ON
►REFRESH           : ON
 ↵reset
 ↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

3 **Press ◄/► to select the desired setting.**

The Setup Menu disappears, and the white screen appears.

To cancel the Refresh function

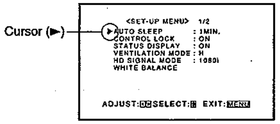
Repeat steps *1* and *2*, then select "OFF" by pressing ◄/►.

Resetting All the Setup Menu Settings

You can reset all the following Setup Menu settings at a time, except the use time of the source lamp (HOUR METER).

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.



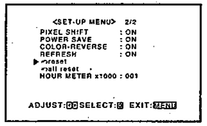
Cursor (►)

```
<SET-UP MENU>    1/2
►AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080i
 WHITE BALANCE

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "reset" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

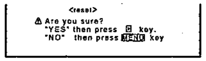


```
<SET-UP MENU>    2/2
 PIXEL SHIFT       : ON
 POWER SAVE        : ON
 COLOR-REVERSE     : ON
 REFRESH           : ON
►↵reset
 ↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:▲▼ EXIT:MENU
```

3 **Press ►.**

The confirmation screen appears.

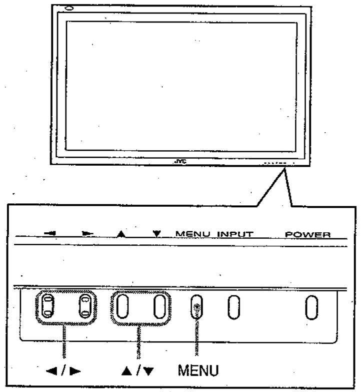


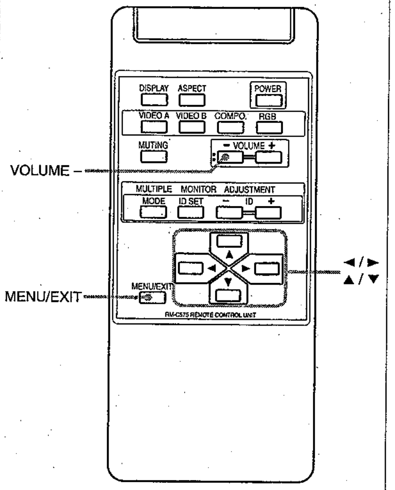
```
        <reset>
⚠ Are you sure?
  "YES" then press ► key.
  "NO"  then press MENU key
```

4 **Press ► again to reset all the Setup Menu settings.**

To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

Other Convenient Functions (Continued)


MENU
INPUT
POWER
◄/►
▲/▼
MENU

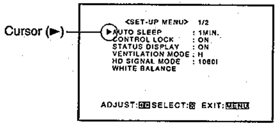

DISPLAY
ASPECT
POWER
VIDEO A
VIDEO B
COMPO.
RGB
MUTING
- VOLUME +
MULTIPLE MONITOR ADJUSTMENT
MODE
ID SET
- ID +
MENU/EXIT
RM-C575 REMOTE CONTROL UNIT
VOLUME
MENU/EXIT
◄/►
▲/▼

Resetting All the Menu Settings

You can reset all the Menu settings and adjustments at a time, except the use time of the source lamp (HOUR METER).

1 **On the remote control:**
Press MENU/EXIT while holding VOLUME – to display the Setup Menu.

On the Monitor:
Press MENU while holding ◄ to display the Setup Menu.

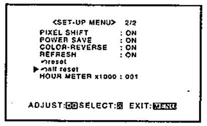


```
<SET-UP MENU>   1/2
►AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080I
 WHITE BALANCE

ADJUST:◄► SELECT:► EXIT:MENU
```

2 **Press ▲/▼ to move the cursor (►) to "all reset" (on the second page).**

- The Setup Menu consists of two pages. If you keep pressing ▲/▼, you can move to the other page from the current page.

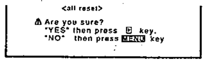


```
<SET-UP MENU>   2/2
 PIXEL SHIFT       : ON
 POWER SAVE        : ON
 COLOR-REVERSE     : ON
 REFRESH           : ON
 ↵reset
►↵all reset
 HOUR METER x1000 : 001

ADJUST:◄► SELECT:► EXIT:MENU
```

3 **Press ►.**

The confirmation screen appears.



```
<all reset>

⚠ Are you sure?
  "YES" then press ► key.
  "NO"  then press MENU key
```

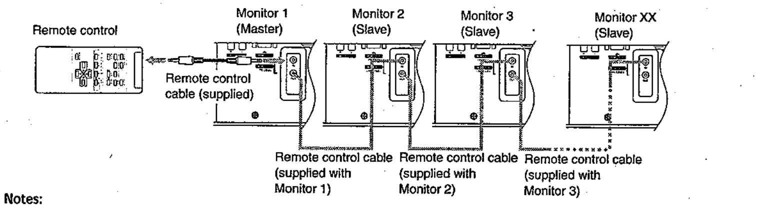
4 **Press ► again to reset all the Menu settings and adjustments.**

To cancel the reset, press MENU/EXIT (or MENU on the Monitor).

Serial Connections and Operations

When the Monitors are serially connected, you can control all of them at the same time (simultaneous operation) or control them one by one separately (individual operation).
For individual operation, you have to assign an ID number to each of the Monitors.
For the purpose of explanation, we will call Monitor 1 as a Master and Monitor 2 and subsequent Monitors as Slaves.

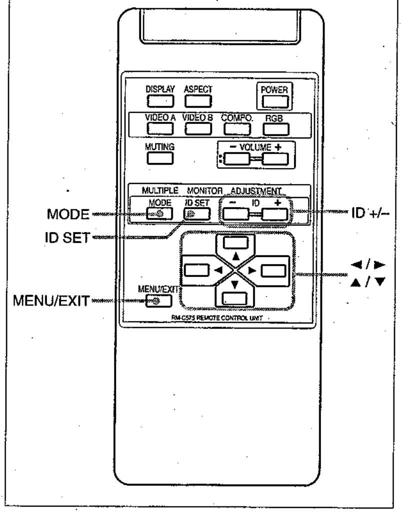
Connecting the Remote Control Cables


Remote control
Monitor 1 (Master)
Monitor 2 (Slave)
Monitor 3 (Slave)
Monitor XX (Slave)
Remote control cable (supplied)
Remote control cable (supplied with Monitor 1)
Remote control cable (supplied with Monitor 2)
Remote control cable (supplied with Monitor 3)

Notes:

- Do not connect the last monitor to Monitor 1.
- When operating with a wired remote control, connect it to the REMOTE 2 (JVC CODE) input terminal of Monitor 1.
- When Monitors are serially connected, Monitor 2 and subsequent Monitors cannot be directly controlled with a wireless remote control.
- Even after the Monitors are serially connected, each of them can be operated using the buttons on the Monitor. However, you cannot perform simultaneous or individual operation even with the buttons on Master Monitor.

- When performing simultaneous or individual operation, use the remote control.

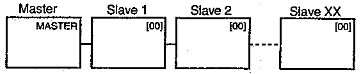

DISPLAY
ASPECT
POWER
VIDEO A
VIDEO B
COMPO.
RGB
MUTING
- VOLUME +
MULTIPLE MONITOR ADJUSTMENT
MODE
ID SET
- ID +
MENU/EXIT
RM-C575 REMOTE CONTROL UNIT
MODE
ID SET
MENU/EXIT
ID +/-
◄/►
▲/▼

Assigning ID Numbers

The following procedure should be performed slowly and securely.

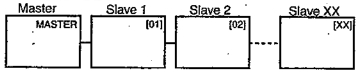
1 **Turn on all the connected Monitors.**

2 **Press MODE.**


Master
Slave 1
Slave 2
Slave XX
MASTER
[00]
[00]
[00]

On Master Monitor screen, "MASTER" is displayed, and "[00]" is displayed on all of Slave Monitor screens.

3 **Press ID SET.**


Master
Slave 1
Slave 2
Slave XX
MASTER
[01]
[02]
[XX]

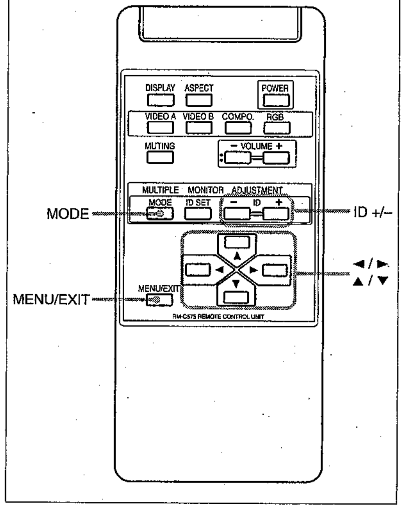
On the Slave Monitor screens, "[01]", "[02]", "[03]", —— and so on will be displayed in the order of connection.

Notes:

- When a maximum number of 20 Monitors are connected, it will take approx. 10 seconds for ID numbers to be displayed on all the screens.
- If "[00]" is displayed on all the Monitor screens or if some of the Monitors have no indication in step 1, press MODE to turn off the indications on all Monitor screens, and then press MODE again.

Serial Connections and Operations (Continued)

- When performing simultaneous or individual operation, use the remote control.


DISPLAY
ASPECT
POWER
VIDEO A
VIDEO B
COMPO.
RGB
MUTING
– VOLUME +
MULTIPLE MONITOR ADJUSTMENT
MODE
ID SET
– ID +
MENU/EXIT
RM-C575 REMOTE CONTROL UNIT
MODE
ID +/–
◄/►
▲/▼
MENU/EXIT

Operating the Monitors Simultaneously

- Check that no ID number is shown on the screens. If any ID numbers are shown, press MODE to erase them.
- The following procedure should be performed slowly and securely.

Example: When adjusting "CONTRAST":

1 Press MENU/EXIT to display the Main Menu.

The Main Menus appear on all the connected Monitors' screens.

2 Press ▲/▼ to move the cursor (►) to "PICTURE ADJ."

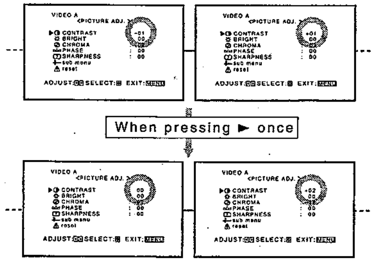
3 Press ► to display the Picture Adjustment Menu.

The Picture Adjustment Menus appear on all the connected Monitors' screens.

4 Press ▲/▼ to move the cursor (►) to "CONTRAST."

5 Press ◄/► to make an adjustment.

At this time, if the Monitors have different "CONTRAST" settings, the adjustment is made, based on the different settings.

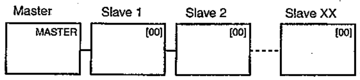

When pressing ► once

6 Press MENU/EXIT twice to exit from the menu operations.

Operating the Monitors Individually

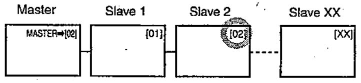
The following procedure should be performed slowly and securely.

1 Press MODE to display the ID numbers on all the connected Monitors' screens.


Master
Slave 1
Slave 2
Slave XX
MASTER
[00]
[00]
[00]

2 Press ID +/– to select the Monitor you want to operate.

Example: To select "[02]":
Press ID + twice.
Slave 2's ID number "[02]" is highlighted.
* The selected ID number will be also shown on the Master Monitor (in this example, "MASTER➡[02]").


Master
Slave 1
Slave 2
Slave XX
MASTER➡[02]
[01]
[02]
[XX]

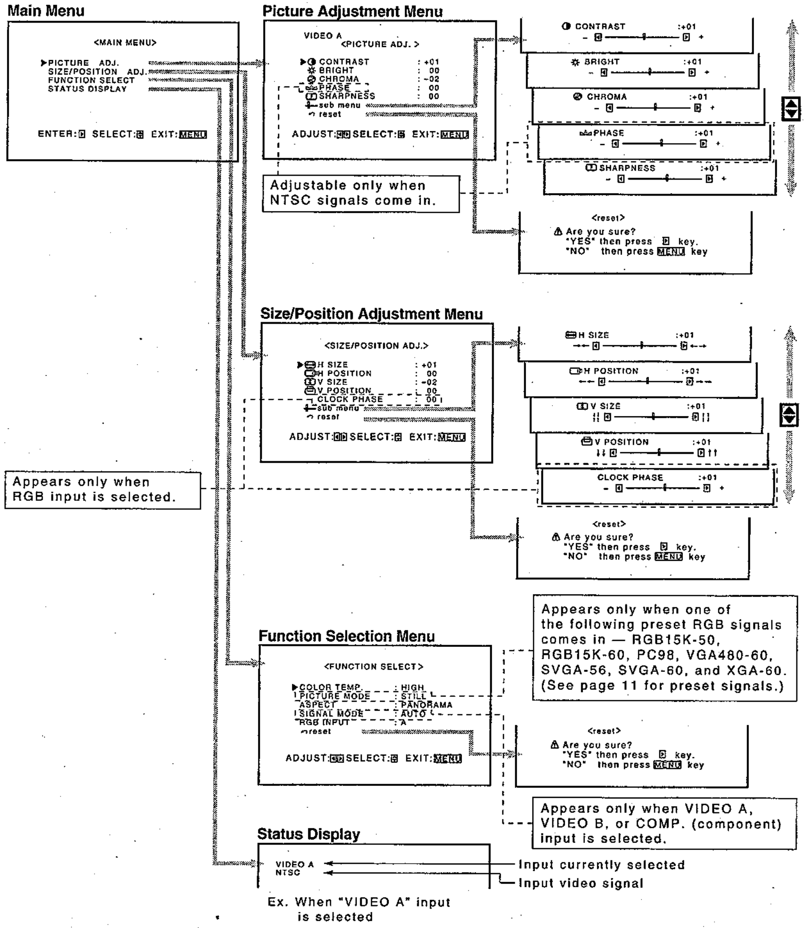
3 Perform any desired operations, such as adjusting menu items.

Notes:

- If "[00]" is displayed on all the Monitor screens or if some of the Monitor screens have no indication in step 1, press MODE to turn off the indications on all screens, and then press MODE again.
- If the ID number of the Monitor selected in step 2 is not highlighted or if the ID numbers of more than one Monitor are highlighted, press MODE to clear the ID numbers, and then start the procedure again from the beginning.

Menu Classifications

Main Menu


Main Menu
<MAIN MENU>
►PICTURE ADJ.
SIZE/POSITION ADJ.
FUNCTION SELECT
STATUS DISPLAY
ENTER:► SELECT:▲▼ EXIT:MENU
Picture Adjustment Menu
VIDEO A
<PICTURE ADJ.>
►CONTRAST : +01
BRIGHT : 00
CHROMA : -02
PHASE : 00
SHARPNESS : 00
sub menu
reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU
CONTRAST :+01
BRIGHT :+01
CHROMA :+01
PHASE :+01
SHARPNESS :+01
<reset>
Are you sure?
"YES" then press ► key.
"NO" then press MENU key
Size/Position Adjustment Menu
<SIZE/POSITION ADJ.>
►H SIZE : +01
H POSITION : 00
V SIZE : -02
V POSITION : 00
CLOCK PHASE : 00
sub menu
reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU
H SIZE :+01
H POSITION :+01
V SIZE :+01
V POSITION :+01
CLOCK PHASE :+01
<reset>
Are you sure?
"YES" then press ► key.
"NO" then press MENU key
Function Selection Menu
<FUNCTION SELECT>
►COLOR TEMP. : HIGH
PICTURE MODE : STILL
ASPECT : PANORAMA
SIGNAL MODE : AUTO
RGB INPUT : A
reset
ADJUST:◄► SELECT:▲▼ EXIT:MENU
<reset>
Are you sure?
"YES" then press ► key.
"NO" then press MENU key
Status Display
VIDEO A
NTSC
Input currently selected
Input video signal

Adjustable only when NTSC signals come in.

Appears only when RGB input is selected.

Appears only when one of the following preset RGB signals comes in — RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, and XGA-60. (See page 11 for preset signals.)

Appears only when VIDEO A, VIDEO B, or COMP. (component) input is selected.

Ex. When "VIDEO A" input is selected

Menu Classifications (Continued)

PICTURE ADJ. (Picture adjustment): See page 16.

CONTRAST	Adjusts the contrast of the picture.
BRIGHT	Adjusts the brightness of the picture.
CHROMA***	Adjusts the color density of the picture.
PHASE*	Adjusts the color phase.
SHARPNESS	Adjusts the outlines of the picture.
sub menu	Displays the fine adjustment bar.
reset	Resets the Picture Adjustment Menu settings to defaults.

SIZE/POSITION ADJ. : See page 17.

H.SIZE	Adjusts the horizontal screen size.
H. POSITION	Adjusts the horizontal screen position.
V. SIZE	Adjusts the vertical screen size.
V.POSITION	Adjusts the vertical screen position.
CLOCK PHASE**	Adjusts to eliminate stripes or flickering. Normally, no adjustment is needed.
sub menu	Displays the fine adjustment bar.
reset	Resets Size/position Adjustment Menu settings to defaults.

FUNCTION SELECT: See pages 19 to 23.

COLOR TEMP.	Adjusts the color temperature. Use when the picture is reddish or bluish.
PICTURE MODE****	Selects the picture quality suited to either the still picture or the moving picture.
ASPECT	Selects the horizontal to vertical ratio of the screen.
SIGNAL MODE***	• Selects a color system (NTSC, NTSC 4.43, PAL, SECAM) when VIDEO A or VIDEO B input is selected. • Selects a scan system — 480i, 576i, 480p, 720p, 1080i (1035i) — when COMPONENT input is selected. Normally, set to "AUTO."
RGB INPUT	Sets the correct RGB terminal you use.
reset	Resets the Function Selection Menu settings to defaults.

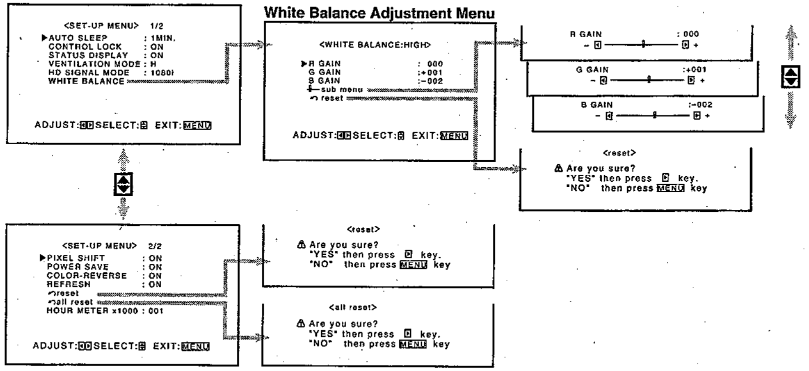
* Adjustment is not possible when RGB input is selected.

** Adjustment is only possible when viewing NTSC signal through the VIDEO A or B terminal.

*** Adjustment is only possible when RGB input is selected.

****Adjustment is only possible when the RGB15K-50, RGB15K-60, PC98, VGA480-60, SVGA-56, SVGA-60, or XGA-60 signals come in.

Setup Menu



White Balance Adjustment Menu

```
<SET-UP MENU>  1/2
▶AUTO SLEEP        : 1MIN.
 CONTROL LOCK      : ON
 STATUS DISPLAY    : ON
 VENTILATION MODE : H
 HD SIGNAL MODE    : 1080i
 WHITE BALANCE

ADJUST:◀▶SELECT:▶  EXIT:MENU
```

```
<SET-UP MENU>  2/2
▶PIXEL SHIFT       : ON
 POWER SAVE        : ON
 COLOR-REVERSE     : ON
 REFRESH           : ON
 reset
 all reset
 HOUR METER x1000 : 001

ADJUST:◀▶SELECT:▶  EXIT:MENU
```

```
<WHITE BALANCE:HIGH>

▶R GAIN              :  000
 G GAIN              :+001
 B GAIN              :−002
 sub menu
 reset

ADJUST:◀▶SELECT:▶  EXIT:MENU
```

```
R GAIN                : 000
  − ◀ ───────┼─────── ▶ +
G GAIN                :+001
  − ◀ ───────┼─────── ▶ +
B GAIN                :−002
  − ◀ ───────┼─────── ▶ +
```

```
<reset>
⚠ Are you sure?
  "YES" then press ▶ key.
  "NO"  then press MENU key
```

```
<all reset>
⚠ Are you sure?
  "YES" then press ▶ key.
  "NO"  then press MENU key
```

AUTO SLEEP	Sets the length of time before standby mode is automatically assumed after the input signal has stopped being supplied. (See page 25.)
CONTROL LOCK	Sets the Monitor so that it cannot be operated with the buttons on itself. (See page 26.)
STATUS DISPLAY	Sets if you want the input terminal and the type of signal to be indicated on the screen just after inputs are switched. (See page 26.)
VENTILATION MODE	Adjusts the cooling fan speed according to the Monitor mounting method. (See page 27.)
HD SIGNAL MODE	Select the High-Definition (HD) signal type. (See page 27.)
WHITE BALANCE	Adjusts R GAIN, G GAIN and B GAIN finely each for "HIGH" and "LOW" settings of the color temperature. (See page 19.)
PIXEL SHIFT	Sets a screen saver. (See page 27.)
POWER SAVE	Sets the power save function. (See page 28.)
COLOR-REVERSE	Use to reverse the color of the still picture to prevent its afterimage from being left on the screen. (See page 29.)
REFRESH	Use to eliminate afterimages on the screen. (See page 29.)
reset	Resets the Setup Menu settings to defaults. (See page 29.)
all reset	Resets the all menu settings and adjustments to defaults. (See page 30.)
HOUR METER	Use to confirm the hours of use. (See page 25.)

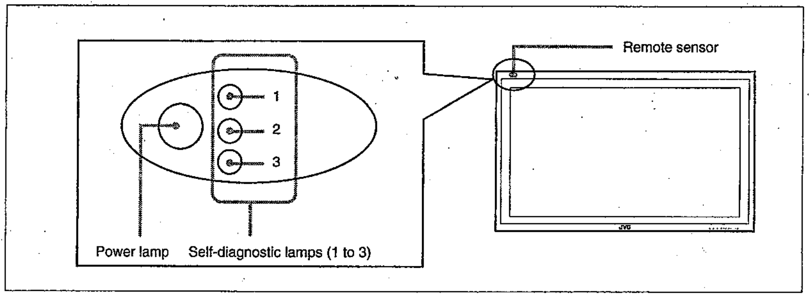
Troubleshooting

Solutions to common problems related to the Monitor are described here. If none of the solutions presented here solves the problem, unplug the Monitor and consult an authorized dealer or service center.

Symptom	Probable cause	Corrective action	Page
Power is not supplied.	• Is the power cord disconnected?	• Insert the power cord (plug) firmly.	12
	• Is the MAIN POWER switch turned on?	• Turn on the MAIN POWER switch.	14
Video image does not appear, or audio sound does not occur.	• Is the correct input selected?	• Select the correct input by pressing VIDEO A, VIDEO B, COMPO. and RGB on the remote control (or INPUT on the Monitor).	14
	• Are the devices connected correctly?	• Connect the devices correctly.	12, 13
	• Are signals being supplied from the connected devices?	• Set the devices correctly.	—
	• Is RGB INPUT set correctly if using the RGB terminals?	• Set it correctly.	23
	• Are input signals (scanning frequency, etc.) appropriate?	• Check if the signal is appropriate (scanning frequency, etc.), and input the appropriate signal.	11
	• Is brightness adjusted correctly?	• Adjust brightness on the menu.	16
	• Is volume set at minimum?	• Adjust volume.	14
	• Are the diagnostic lamps turned on?	• Refer to "Self-diagnostic indication," and take an appropriate action.	37
The picture becomes blurred.	• Is the signal RGB input?	• Adjust CLOCK PHASE using the menu.	17
Colour is abnormally dark or bright.	• Is brightness adjusted correctly?	• Adjust BRIGHT (brightness) using the menu.	16
Colour is poor or unstable.	• Is picture quality (colour density, etc.) adjusted correctly?	• Adjust PICTURE using the menu.	16
	• Is the correct broadcast system (colour system) selected?	• Set SIGNAL MODE (colour system) to "AUTO."	22
	• Are signals (scanning frequency, etc.) to connected devices appropriate?	• Check if the signal is appropriate (scanning frequency, etc.), and input the appropriate signal.	11
The picture is cut or shifted toward one side.	• Is the size or position of the screen adjusted properly?	• Adjust H.SIZE, V.SIZE, H.POSITION or V.POSITION using the menu.	17
The remote control does not work.	• Are the batteries correctly set?	• Insert batteries correctly, observing the polarities (⊕ and ⊖).	9
	• Are the batteries exhausted?	• Replace with new batteries.	9
	• Is there any object blocking the path between the remote control and remote sensor?	• Remove any blocking object.	—
	• Is the Monitor too far away from you?	• Move toward the Monitor, then operate the remote control.	—
	• Is the Monitor connected serially to another Monitor (Serial Connection)?	• Only Master Monitor can be controlled by the remote control when connected serially.	31
The buttons on the Monitor do not work.	• Is the Control Lock function in use?	• Set the Control Lock function to "OFF" using the menu.	26

Self-diagnostic Indication

The screen monitor may automatically turn off and self-diagnostic lamps next to the power lamp may light or flash.
When something abnormal occurs with the Monitor, this function informs you of the condition of the Monitor with self-diagnostic lamps, allowing for smooth service work.
If the self-diagnostic lamps glow or flash in red, use the following procedure before consulting the dealer where you purchased the Monitor.



1. **Check which lamps are lighting or flashing.**
   On the Self-diagnostic Report Sheet (below), check the box next to "Lights" or "Flashes" of the corresponding lamp or lamps.
   - Depending on a particular case, only one lamp may light or flash, or all three lamps may do so.
2. **Turn off the MAIN POWER switch on the back of the Monitor.**
3. **Unplug the power cord.**
4. **Call your dealer and tell which lamps are lighting or flashing. (Copy and fax the Self-diagnostic Report Sheet below.)**

Note:
- If you turn on the Monitor soon after turning it off (or after recovering from a brief power interruption), the self-diagnostic lamps may light (or flash), and no image may appear on the screen. In this case, turn off the Monitor again, wait for about 10 seconds, then turn it on again. If no self-diagnostic lamps light or flash, you can operate and use the Monitor as usual.

Store name where you purchased the Monitor

To

Model Name:
Plasma Display Monitor
GD-V4210PZW/GD-V4210PZW-G
GD-V4210PCE/GD-V4210PCE-G
GD-V4211PCE

Self-diagnostic Report Sheet

The self-diagnostic lamps light or flash as listed on the following table. Please give me immediate advice or service if necessary.

Self-diagnostic lamps			
NO.	Lamp position	Conditions	
1	Upper	☐ Lights	☐ Flashes
2	Middle	☐ Lights	☐ Flashes
3	Lower	☐ Lights	☐ Flashes

Your Name:	
Telephone No.:	
Address:	

Specifications

		Model name	GD-V4210PZW / GD-V4210PZW-G	GD-V4210PCE / GD-V4210PCE-G / GD-V4211PCE
General		Frame color	GD-V4210PZW: Silver GD-V4210PZW-G: Gray	GD-V4210PCE / GD-V4211PCE: Silver GD-V4210PCE-G: Gray
		Screen size	Type 42 wide format	
		Aspect ratio	16:9 (Wide format)	
		Number of pixels displayed	853 (H) x 480 (V)	
		Number of colors displayed	16.77 million (256 colors for each of RGB)	
		Effective screen size (W x H, Diagonally)	92.1 cm x 51.8 cm (36-3/8" x 20-1/2"), 105.7 cm (41-5/8")	
		Weight	35.8 kg (78.8 lbs.)	
		External dimensions (W x H x D)	103.5 cm x 64.0 cm x 8.9 cm (40-3/4" x 25-1/4" x 3-5/8") * Excluding protruding parts	
		Power requirements	AC 120 V / AC 230 V, 50 Hz/60 Hz	
		Rated input current	3.5 A (AC 120 V) / 1.9 A (AC 230 V)	
		Compatible systems VIDEO A, B input	NTSC, NTSC 4.43, PAL, SECAM	———— [*1]
		COMPONENT input	480i, 576i, 480p, 720p, 1080i (1035i)	———— [*1]
		Audio power output	INTERNAL: 2 W + 2 W (TYP at impedance 8 Ω) EXTERNAL: 3 W + 3 W (TYP at impedance 6 Ω)	
		Built-in speakers	2 pcs., 4 cm x 7 cm oval-shaped, impedance 6 Ω	
		Operating conditions	Temperature: 0 °C to 40 °C Relative humidity: 20 % to 80 % (non-condensation)	
Input/output terminals[*1]	AV terminals[*1]	VIDEO A Video input	BNC terminal x 1, 1 V(p-p), 75 Ω	———— [*1]
		Video output	BNC terminal x 1, 1 V(p-p), 75 Ω	———— [*1]
		Audio input	Pin jack terminal x 2 (L/R) 500 mV(rms), high impedance	———— [*1]
		VIDEO B Y/C input	Y/C terminal x 1 Y: 1 V(p-p), 75 Ω C: 0.286 V(p-p), 75 Ω (for NTSC) C: 0.3 V(p-p), 75 Ω (for PAL/SECAM)	———— [*1]
		Video input	Pin jack terminal x 1, 1 V(p-p), 75 Ω	———— [*1]
		Audio input	Pin jack terminal x 2 (L/R) 500 mV(rms), high impedance	———— [*1]
		COMPONENT COMPONENT input	BNC terminal x 3 Y: 1 V(p-p), 75 Ω P_B/B-Y: 0.7 V(p-p), 75 Ω P_R/R-Y: 0.7 V(p-p), 75 Ω	———— [*1]
		Audio input	Pin jack terminal x 2 (L/R) 500 mV(rms), high impedance	———— [*1]

		Model name	GD-V4210PZW / GD-V4210PZW-G	GD-V4210PCE / GD-V4210PCE-G / GD-V4211PCE
Input/output terminals[*1]	RGB terminals	RGB A RGB input	D-sub 3-row 15-pin terminal x 1, Video signal: 0.7 V(p-p), 75 Ω Sync signal: TTL level	
		RGB B RGB input	BNC terminal x 5 (Bridge connection possible, auto termination) Analog RGB: R: 0.7 V(p-p), 75 Ω G: 0.7 V(p-p), 75 Ω B: 0.7 V(p-p), 75 Ω G on sync: 1 V(p-p), 75 Ω (negative sync) Horizontal sync/Composite sync (HD/Cs): HD: 1 V(p-p) to 5 V(p-p), high impedance (positive/negative polarity) Cs: 1 V(p-p) to 5 V(p-p), high impedance (positive/negative polarity) Vertical sync (VD): VD: 1 V(p-p) to 5 V(p-p), high impedance (positive/negative polarity)	
		RGB output	BNC terminal x 5 (Loop through output for bridge connection)	
		AUDIO Audio input	Pin jack terminal x 2 (L/R) 500 mV(rms), high impedance (for RGB A or RGB B)	
	REMOTE 1 (RS232C) terminal		D-sub 9-pin terminal x 1	
	REMOTE 2 (JVC CODE) IN/OUT terminals		Stereo mini jack terminal x 2	
	SPEAKER OUT terminal		Impedance 6 Ω to 16 Ω	
	AUDIO output terminal		Pin jack terminal x 2 (L/R) Output impedance 600 Ω	

[*1] GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE do not have the following input terminals – VIDEO A, VIDEO B, and COMPONENT.
You need to install the video interface kit (IF-C421P1W), which is separately purchased, to reproduce input images for VIDEO A, VIDEO B, and COMPONENT.

- For easy understanding, pictures and illustrations are shown by being emphasized, omitted or composed, and may be more or less different from actual products.
- Design and specifications are subject to change without notice.
- IBM and IBM PC are registered trademarks of International Business Machines Corporation. Macintosh is registered trademarks of Apple Computer, Inc.
  All other product names mentioned herein are used for identification purposes only, and may be the trademarks or registered trademarks of their respective companies.

Options (not supplied)

Stand Unit	TS-C420P1W, TS-C420P4W, TS-C420P5W, TS-C420P7W
Wall Mounting Unit	TS-C420P2W, TS-C420P6W
Ceiling suspension Unit	TS-C420P3W
Video Interface Kit	IF-C421P1W (Only for GD-V4210PCE, GD-V4210PCE-G, and GD-V4211PCE)

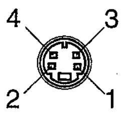
Notice on transportation

This Monitor is precision equipment and needs dedicated packing material for transportation.
Never use any packing material supplied from other than JVC or JVC-authorized dealers.

Specifications (Continued)

Pin assignment (Specifications for terminals)

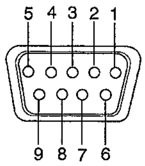
- **Y/C terminal**



Pin number	Signal name
1	GND (Y)
2	GND (C)
3	Y
4	C

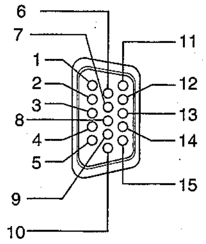
- **RS-232C terminal**

This is a female type connector.



Pin number	Signal name	Pin number	Signal name
1	DCD	6	DSR
2	RD	7	RTS
3	TD	8	CTS
4	DTR	9	RI
5	GND		

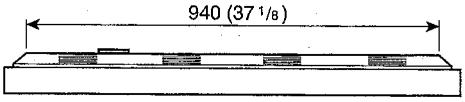
- **RGB Input Terminal**


6
7
1
2
3
8
4
5
9
10
11
12
13
14
15

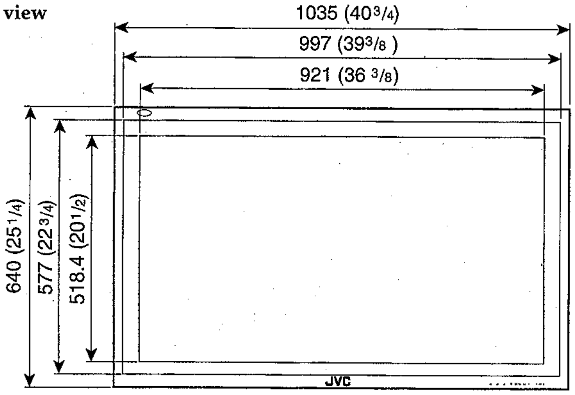
Pin number	Signal name	Pin number	Signal name
1	Red	9	N/C
2	Green	10	GND
3	Blue	11	GND
4	N/C	12	N/C
5	GND	13	HD/Cs
6	GND	14	VD
7	GND	15	N/C
8	GND	External	GND

Dimensions

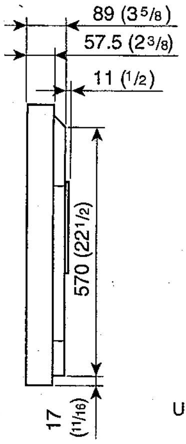
Top view



Front view


1035 (40 3/4)
997 (39 3/8)
921 (36 3/8)
640 (25 1/4)
577 (22 3/4)
518.4 (20 1/2)
JVC

Side view


89 (3 5/8)
57.5 (2 3/8)
11 (1/2)
570 (22 1/2)
17 (11/16)

Unit: mm (inch)

GD-V4210PZW/GD-V4210PZW-G
/GD-V4210PCE/GD-V4210PCE-G/GD-V4211PCE

PLASMA DISPLAY MONITOR

JVC

VICTOR COMPANY OF JAPAN, LIMITED

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GD-V4210PZW / GD-V4210PZW-G
GD-V4210PCE / GD-V4210PCE-G
STANDARD CIRCUIT DIAGRAM

■ NOTE ON USING CIRCUIT DIAGRAMS

1. SAFETY

The components identified by the⚠ symbol and shading are critical for safety. For continued safety replace safety critical components only with manufactures recommended parts.

2.SPECIFIED VOLTAGE AND WAVEFORM VALUES

The voltage and waveform values have been measured under the following conditions.

(1)Input signal :Colour bar signal
(2)Setting positions of each knob/button and variable resistor :Original setting position when shipped
(3)Internal resistance of tester :DC 20kΩ/V
(4)Oscilloscope sweeping time :H ⇒ 20μS/div
:V ⇒ 5mS/div
:Others ⇒ Sweeping time is specified
(5)Voltage values :All DC voltage values

∗ Since the voltage values of signal circuit vary to some extent according to adjustments, use them as reference values.

3.INDICATION OF PARTS SYMBOL [EXAMPLE]

- In the PW board :R1209→R209

4.INDICATIONS ON THE CIRCUIT DIAGRAM

(1)Resistors

●Resistance value
No unit :[Ω]
K :[KΩ]
M :[MΩ]

●Rated allowable power
No indication :1/10[W]
Others :As specified

●Type
No indication :Carbon resistor
OMR :Oxide metal film resistor
MFR :Metal film resistor
MPR :Metal plate resistor
UNFR :Uninflammble resistor
FR :Fusible resistor

*Composition resistor 1/2 [W] is specified as 1/2S or Comp.

(2)Capacitors

●Capacitance value
1 or higher :[pF]
less than 1 :[μF]

●Withstand voltage
No indication :DC50[V]
AC indicated :AC withstand voltage [V]
Others :DC withstand voltage [V]

*Electrolytic Capacitors
47/50[Example]:Capacitance value [μF]/withstand voltage[V]

●Type
No indication :Ceramic capacitor
MY :Mylar capacitor
MM :Metalized mylar capacitor
PP :Polypropylene capacitor
MPP :Metalized polypropylene capacitor
MF :Metalized film capacitor
TF :Thin film capacitor
BP :Bipolar electrolytic capacitor
TAN :Tantalum capacitor

(3)Coils
No unit :[μH]
Others :As specified

(4)Power Supply
═══════ :B1
▬▬▬▬ :B2(12V)
▬▭▬▭ :9V
▭▭▭▭ :5V

*Respective voltage values are indicated

(5)Test point
⦿ :Test point
○ :Only test point display

(6)Connecting method
▭ :Connector
○ :Wrapping or soldering
→≻ →≻ :Receptacle

(7)Ground symbol
⊥ :LIVE side ground
⏚ :ISOLATED(NEUTRAL) side ground
⏚ :EARTH ground
▽ :DIGITAL ground

5.NOTE FOR REPAIRING SERVICE

This model's power circuit is partly different in the GND. The difference of the GND is shown by the LIVE : (⊥) side GND and the ISOLATED(NEUTRAL) : (⏚) side GND. Therefore, care must be taken for the following points.

(1)Do not touch the LIVE side GND or the LIVE side GND and the ISOLATED(NEUTRAL) side GND simultaneously. If the above caution is not respected, an electric shock may be caused. Therefore, make sure that the power cord is surely removed from the receptacle when, for example, the chassis is pulled out.

(2)Do not short between the LIVE side GND and ISOLATED(NEUTRAL) side GND or never measure with a measuring apparatus (oscilloscope, etc.) the LIVE side GND and ISOLATED(NEUTRAL) side GND at the same time. If the above precaution is not respected , a fuse or any parts will be broken.

◇Since the circuit diagram is a standard one, the circuit and circuit constants may be subject to change for improvement without any notice.

Oct. 2000 No.51767

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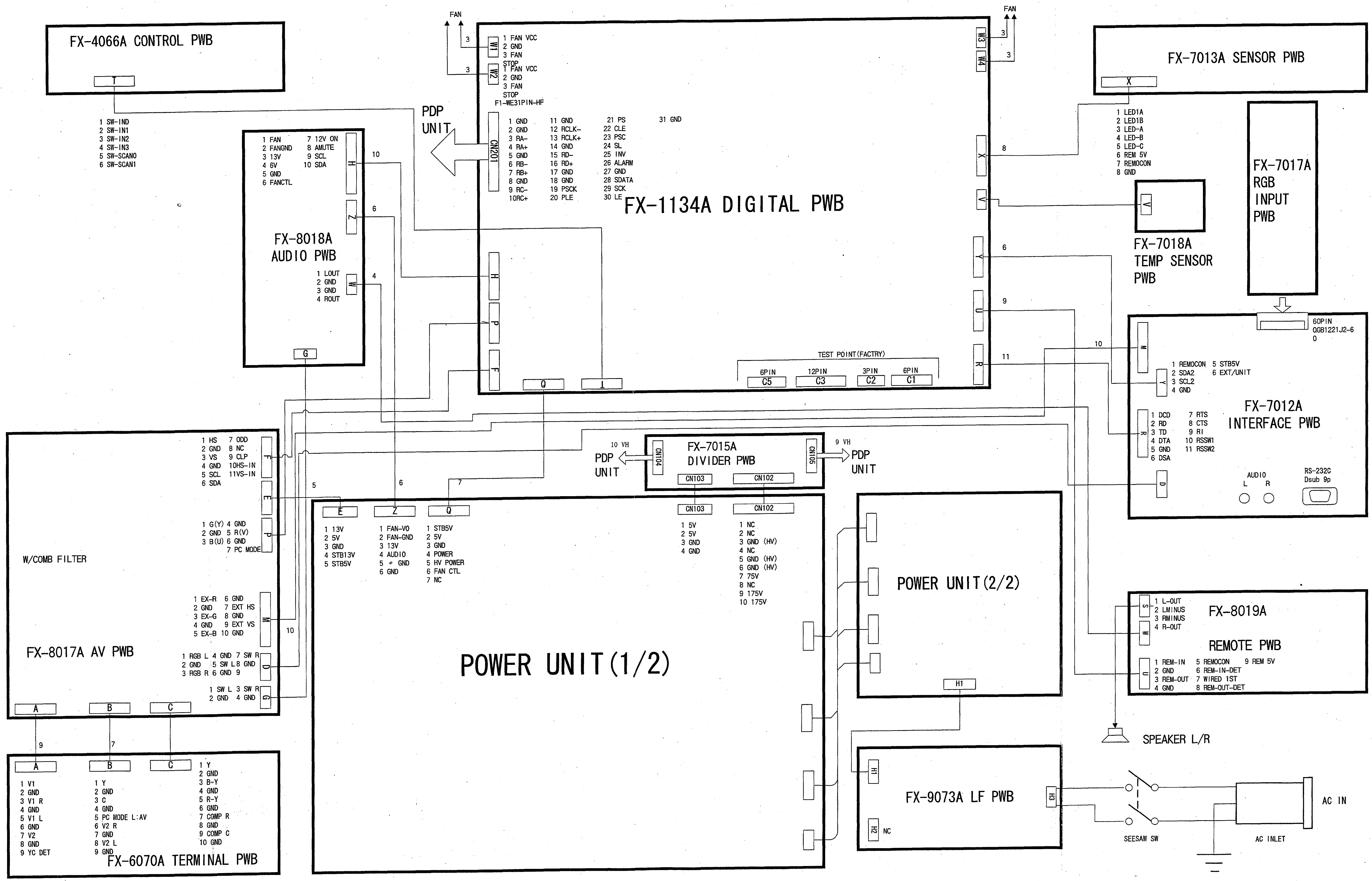
DIFFERENCE LIST

	GD-V4210PZW GD-V4210PZW-G	GD-V4210PCE GD-V4210PCE-G
TERMINAL PWB	FX-6070A	×

WIRING DIAGRAM


FX-4066A CONTROL PWB
T
1 SW-IND
2 SW-IN1
3 SW-IN2
4 SW-IN3
5 SW-SCAN0
6 SW-SCAN1
FX-8018A
AUDIO PWB
1 FAN
2 FANGND
3 13V
4 6V
5 GND
6 FANCTL
7 12V ON
8 AMUTE
9 SCL
10 SDA
H
Z
W
G
1 LOUT
2 GND
3 GND
4 ROUT
10
6
4
FAN
3
3
W1
W2
1 FAN VCC
2 GND
3 FAN STOP
1 FAN VCC
2 GND
3 FAN STOP
F1-WE31PIN-HF
PDP UNIT
CN201
1 GND
2 GND
3 RA-
4 RA+
5 GND
6 RB-
7 RB+
8 GND
9 RC-
10RC+
11 GND
12 RCLK-
13 RCLK+
14 GND
15 RD-
16 RD+
17 GND
18 GND
19 PSCK
20 PLE
21 PS
22 CLE
23 PSC
24 SL
25 INV
26 ALARM
27 GND
28 SDATA
29 SCK
30 LE
31 GND
FX-1134A DIGITAL PWB
H
P
F
Q
T
TEST POINT(FACTRY)
6PIN C5
12PIN C3
3PIN C2
6PIN C1
W3
W4
X
V
Y
U
R
8
6
9
11
10
FX-7013A SENSOR PWB
X
1 LED1A
2 LED1B
3 LED-A
4 LED-B
5 LED-C
6 REM 5V
7 REMOCON
8 GND
V
FX-7018A
TEMP SENSOR
PWB
FX-7017A
RGB
INPUT
PWB
60PIN
QGB1221J2-6
0
M
Y
R
D
1 REMOCON
2 SDA2
3 SCL2
4 GND
5 STB5V
6 EXT/UNIT
FX-7012A
INTERFACE PWB
1 DCD
2 RD
3 TD
4 DTA
5 GND
6 DSA
7 RTS
8 CTS
9 RI
10 RSSW1
11 RSSW2
AUDIO
L R
RS-232C
Dsub 9p
1 HS
2 GND
3 VS
4 GND
5 SCL
6 SDA
7 ODD
8 NC
9 CLP
10HS-IN
11VS-IN
F
E
P
M
D
G
1 G(Y)
2 GND
3 B(U)
4 GND
5 R(V)
6 GND
7 PC MODE
W/COMB FILTER
1 EX-R
2 GND
3 EX-G
4 GND
5 EX-B
6 GND
7 EXT HS
8 GND
9 EXT VS
10 GND
FX-8017A AV PWB
1 RGB L
2 GND
3 RGB R
4 GND
5 SW L
6 GND
7 SW R
8 GND
9
1 SW L
2 GND
3 SW R
4 GND
A
B
C
9
7
A
B
C
1 V1
2 GND
3 V1 R
4 GND
5 V1 L
6 GND
7 V2
8 GND
9 YC DET
1 Y
2 GND
3 C
4 GND
5 PC MODE L:AV
6 V2 R
7 GND
8 V2 L
9 GND
1 Y
2 GND
3 B-Y
4 GND
5 R-Y
6 GND
7 COMP R
8 GND
9 COMP C
10 GND
FX-6070A TERMINAL PWB
5
6
7
10
E
Z
Q
1 13V
2 5V
3 GND
4 STB13V
5 STB5V
1 FAN-VO
2 FAN-GND
3 13V
4 AUDIO
5 ⁄⁄ GND
6 GND
1 STB5V
2 5V
3 GND
4 POWER
5 HV POWER
6 FAN CTL
7 NC
POWER UNIT(1/2)
10 VH
PDP UNIT
CN104
FX-7015A
DIVIDER PWB
CN105
9 VH
PDP UNIT
CN103
CN102
CN103
CN102
1 5V
2 5V
3 GND
4 GND
1 NC
2 NC
3 GND (HV)
4 NC
5 GND (HV)
6 GND (HV)
7 75V
8 NC
9 175V
10 175V
POWER UNIT(2/2)
H1
H1
H2
NC
H3
FX-9073A LF PWB
S
W
U
1 L-OUT
2 LMINUS
3 RMINUS
4 R-OUT
FX-8019A
REMOTE PWB
1 REM-IN
2 GND
3 REM-OUT
4 GND
5 REMOCON
6 REM-IN-DET
7 WIRED 1ST
8 REM-OUT-DET
9 REM 5V
SPEAKER L/R
SEESAW SW
AC INLET
AC IN

DIGITAL PWB ASSY FX-1134A(1/7)

SYMBOL	PAL	VGA
Q101		
E	5.0	←
C	12.0	←
B	5.6	←
Q102		
E	3.0	←
C	0.0	←
B	2.5	←
Q103		
E	3.2	←
C	0.0	←
B	2.5	←
Q104		
E	4.9	←
C	12.0	←
B	5.6	←
Q105		
E	3.2	←
C	0.0	←
B	2.4	←
Q106		
E	3.2	←
C	0.0	←
B	2.4	←
Q107		
E	4.9	←
C	12.0	←
B	5.6	←
Q108		
E	3.2	←
C	0.0	←
B	2.5	←
Q109		
E	3.2	←
C	0.0	←
B	2.5	←
Q110		
E	0.0	–
C	4.3	–
B	0.0	–
Q111		
E	2.7	–
C	12.0	–
B	3.2	–
Q112		
E	2.7	–
C	12.0	–
B	3.3	–
Q113		
E	2.7	–
C	12.0	–
B	3.3	–
Q118		
1	12.0	←
2	5.7	4.6
3	5.1	3.6
4	12.0	←
5	5.1	3.6
6	4.6	3.6
IC101		
1	3.2	–
2	4.3	–
3	3.2	–
4	3.3	–
5	0.0	–
6	3.3	–
7	12.0	–
8	–	–
9	3.2	–
10	3.2	–
11	3.2	–
12	–	–
13	–	–
14	–	–
15	–	–
16	–	–
17	3.2	–
18	3.2	–
IC102		
1	12.0	←
2	2.6	2.7
3	4.7	5.7
4	0.0	←
5	12.0	←
6	2.7	←
7	6.0	←
8	0.0	←
9	12.0	←
10	2.7	←
11	5.2	5.9
12	0.0	←
13	7.2	8.2
14	0.1	←
15	4.6	3.6
16	12.0	←
17	0.0	←
18	6.2	6.0
19	4.7	4.6
20	3.9	3.4
21	0.0	←
22	4.8	6.0
23	4.6	←
24	3.5	3.4
25	0.0	←
26	6.2	6.0
27	4.7	4.6
28	3.9	3.4
IC103		
1	5.0	←
2	4.6	4.7
3	4.6	4.7
4	3.6	6.0
5	6.4	6.1
6	8.3	10.4
7	5.1	1.0
8	0.0	←
9	5.0	←
10	0.0	←
11	5.0	←
12	4.5	6.0
13	6.0	←
14	3.5	5.6
15	3.6	6.0
16	12.0	←
17	5.0	←
18	0.0	←
19	0.0	←
20	5.0	←
IC104		
1	0.0	0.5
2	4.1	4.1
3	0.0	0.5
4	0.0	0.0
5	–	–
6	0.0	0.0
7	4.8	4.4
8	5.0	5.0
IC113		
1	0.3	4.3
2	4.6	4.6
3	0.0	0.0
4	0.0	0.0
5	–	–
6	0.2	0.0
7	4.5	0.6
8	4.9	4.9
IC112		
1	6.0	←
2	6.0	←
3	6.0	←
4	0.0	←
5	0.0	←
6	12.0	←
7	12.0	←
8	12.0	←
IC201		
1	0.0	←
2	1.7	0.7
3	2.3	0.7
4	2.1	0.8
5	2.7	1.4
6	2.4	1.4
7	2.6	1.4
8	2.2	0.2
9	1.4	1.4
10	1.8	1.4
11	0.0	←
12	0.0	←
13	5.0	←
14	5.0	←
15	–	←
16	3.4	←
17	2.9	←
18	5.0	←
19	5.0	←
20	0.0	←
IC202		
1	0.0	←
2	1.7	0.6
3	2.1	1.2
4	2.8	1.4
5	2.5	1.4
6	1.4	1.4
7	1.4	0.0
8	1.2	0.2
9	0.9	1.4
10	1.8	1.4
11	0.0	←
12	0.0	←
13	5.0	←
14	5.0	←
15	–	←
16	3.5	←
17	2.9	←
18	5.0	←
19	5.0	←
20	0.0	←
IC203		
1	0.0	←
2	1.9	0.9
3	2.3	1.6
4	2.7	0.5
5	2.2	0.2
6	2.5	0.2
7	2.5	1.5
8	2.5	0.2
9	1.4	1.5
10	1.8	1.4
11	0.0	←
12	0.0	←
13	5.0	←
14	5.0	←
15	–	←
16	3.4	←
17	2.9	←
18	5.0	←
19	5.0	←
20	0.0	←
IC204		
1	0.0	←
2	1.7	0.7
3	2.3	0.7
4	2.1	0.8
5	2.7	1.4
6	2.4	1.4
7	2.6	1.4
8	2.2	0.2
9	1.4	1.4
10	0.0	←
11	1.8	1.4
12	1.6	1.8
13	2.9	0.0
14	3.4	1.8
15	3.2	1.8
16	3.5	1.8
17	2.8	0.7
18	2.8	0.9
19	2.3	0.9
20	5.0	←
IC205		
1	0.0	←
2	1.7	0.6
3	2.1	1.2
4	2.8	1.4
5	2.5	1.4
6	1.4	1.4
7	1.4	0.0
8	1.2	0.2
9	0.9	1.4
10	0.0	←
11	1.8	1.4
12	0.9	1.8
13	1.3	0.0
14	1.7	0.0
15	1.7	1.8
16	3.3	1.7

DIGITAL PWB ASSY FX-1134A(4/7)

UNIT:[V]

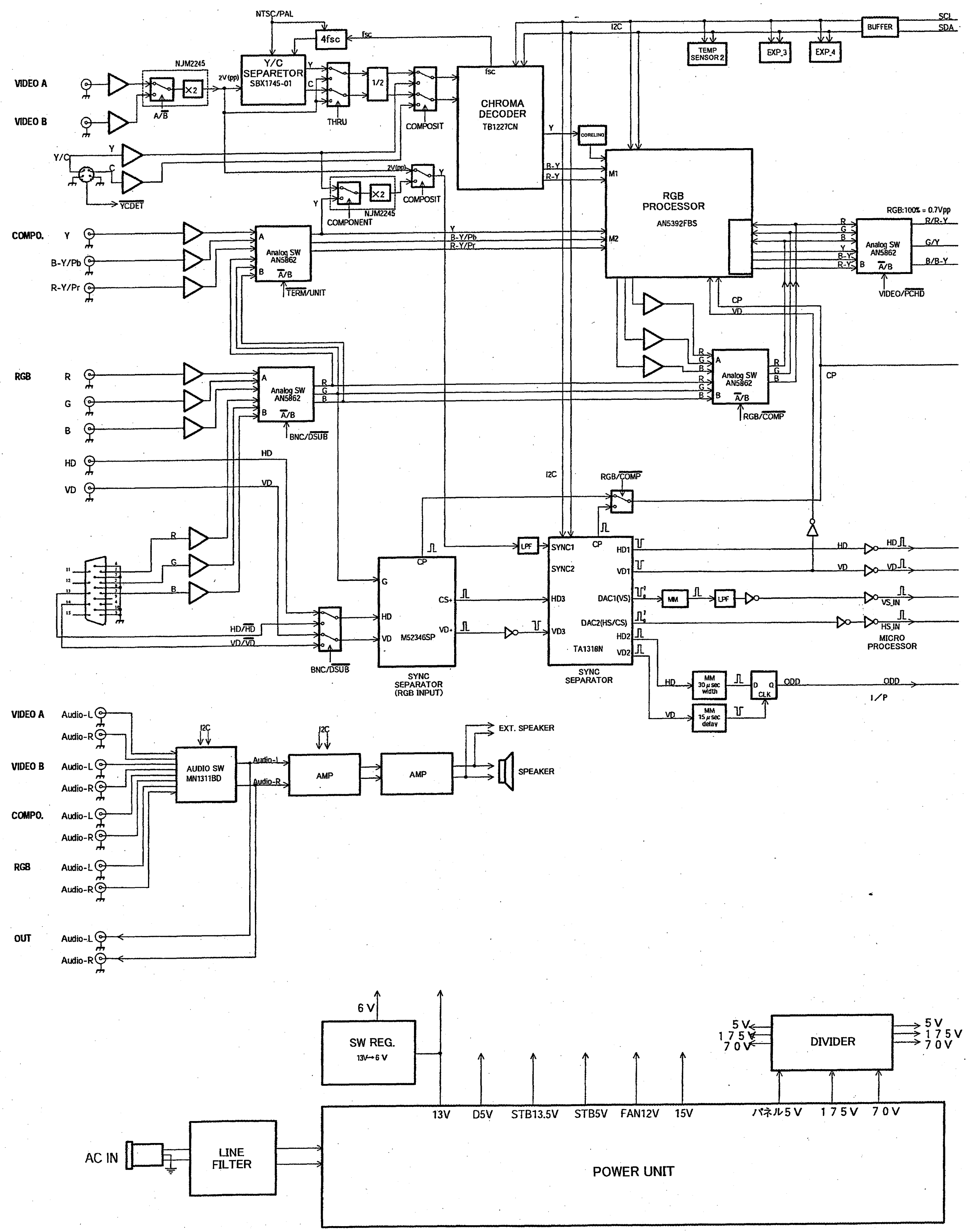
SYMBOL	PAL	VGA
Q701		
E	6.9	–
C	12.0	–
B	7.5	–
Q702		
E	4.1	–
C	0.0	–
B	3.4	–
Q703		
E	6.9	–
C	12.0	–
B	7.5	–
Q704		
E	4.1	–
C	0.0	–
B	3.4	–
Q705		
E	6.9	–
C	12.0	–
B	7.5	–
Q706		
E	4.1	–
C	0.0	–
B	3.4	–
Q722		
1	12.0	←
2	5.5	5.1
3	5.0	4.5
4	12.0	←
5	5.0	4.5
6	4.5	4.0
IC705		
1	12.0	←
2	2.6	2.5
3	6.0	6.5
4	0.0	←
5	12.0	←
6	2.7	2.6
7	6.0	←
8	0.0	←
9	12.0	←
10	2.7	←
11	6.3	←
12	0.0	←
13	7.5	6.9
14	0.2	←
15	4.5	4.0
16	12.0	←
17	0.0	←
18	4.9	4.8
19	4.6	4.5
20	3.5	3.1
21	0.0	←
22	4.9	←
23	4.5	←
24	3.5	2.9
25	0.0	←
26	5.0	4.8
27	4.6	4.5
28	3.5	3.1
IC706		
1	5.0	←
2	4.6	4.7
3	4.6	4.7
4	3.8	←
5	3.9	3.5
6	9.0	7.8
7	4.5	2.9
8	0.0	←
9	5.0	←
10	0.0	←
11	5.0	←
12	6.7	6.6
13	6.0	←
14	6.1	7.0
15	3.8	←
16	12.0	←
17	5.0	←
18	0.0	←
19	5.0	←
20	5.0	←
IC722		
1	6.0	–
2	6.0	–
3	6.0	–
4	0.0	–
5	0.0	–
IC701		
1	0.0	–
2	0.6	–
3	0.6	–
4	0.6	–
5	0.5	–
6	0.6	–
7	0.6	–
8	0.0	–
9	1.1	–
10	0.0	–
11	1.5	2.1
12	1.8	1.5
13	0.0	2.1
14	1.1	1.6
15	0.7	1.6
16	1.4	1.7
17	0.9	1.7
18	0.8	1.6
19	0.9	1.6
20	4.9	4.9
IC702		
1	0.0	–
2	0.6	–
3	0.6	–
4	0.5	–
5	0.9	–
6	0.3	–
7	1.2	–
8	0.0	–
9	1.2	–
10	0.0	–
11	1.5	2.1
12	1.8	1.1
13	0.0	1.1
14	1.8	1.1
15	0.4	1.2
16	1.4	1.0
17	0.8	1.1
18	0.8	1.0
19	0.9	1.1
20	4.9	4.9
IC703		
1	0.0	–
2	0.6	–
3	0.6	–
4	0.5	–
5	0.6	–
6	1.0	–
7	0.6	–
8	0.0	–
9	1.1	–
10	0.0	–
11	1.5	2.1
12	1.9	1.7
13	0.1	1.9
14	1.5	1.6
15	1.0	1.7
16	0.5	1.6
17	0.8	1.6
18	0.9	1.6
19	0.8	1.5
20	4.9	4.9
IC704		
1	1.8	1.5
2	0.0	2.1
3	1.1	1.6
4	0.7	1.6
5	1.4	1.7
6	0.9	1.7
7	0.8	1.1
8	0.9	1.6
9	1.8	1.1
10	0.0	1.1
11	1.8	1.1
12	0.4	1.1
13	1.4	1.1
14	0.7	1.1
15	0.8	1.0
16	0.9	1.1
17	0.0	←
18	1.7	←
19	0.1	1.9
20	1.5	1.6
21	1.0	1.7
22	0.5	1.6
23	0.8	1.6
24	0.9	1.6
25	0.8	1.5
26	1.5	2.1
27	1.5	2.1
28	1.5	2.1
29	0.0	←
30	4.9	←
31	2.7	2.6
32	5.0	←
33	4.0	←
34	4.0	←
35	0.0	←
36	4.2	4.3
37	0.0	←

DIGITAL PWB ASSY FX-1134A(7/7)

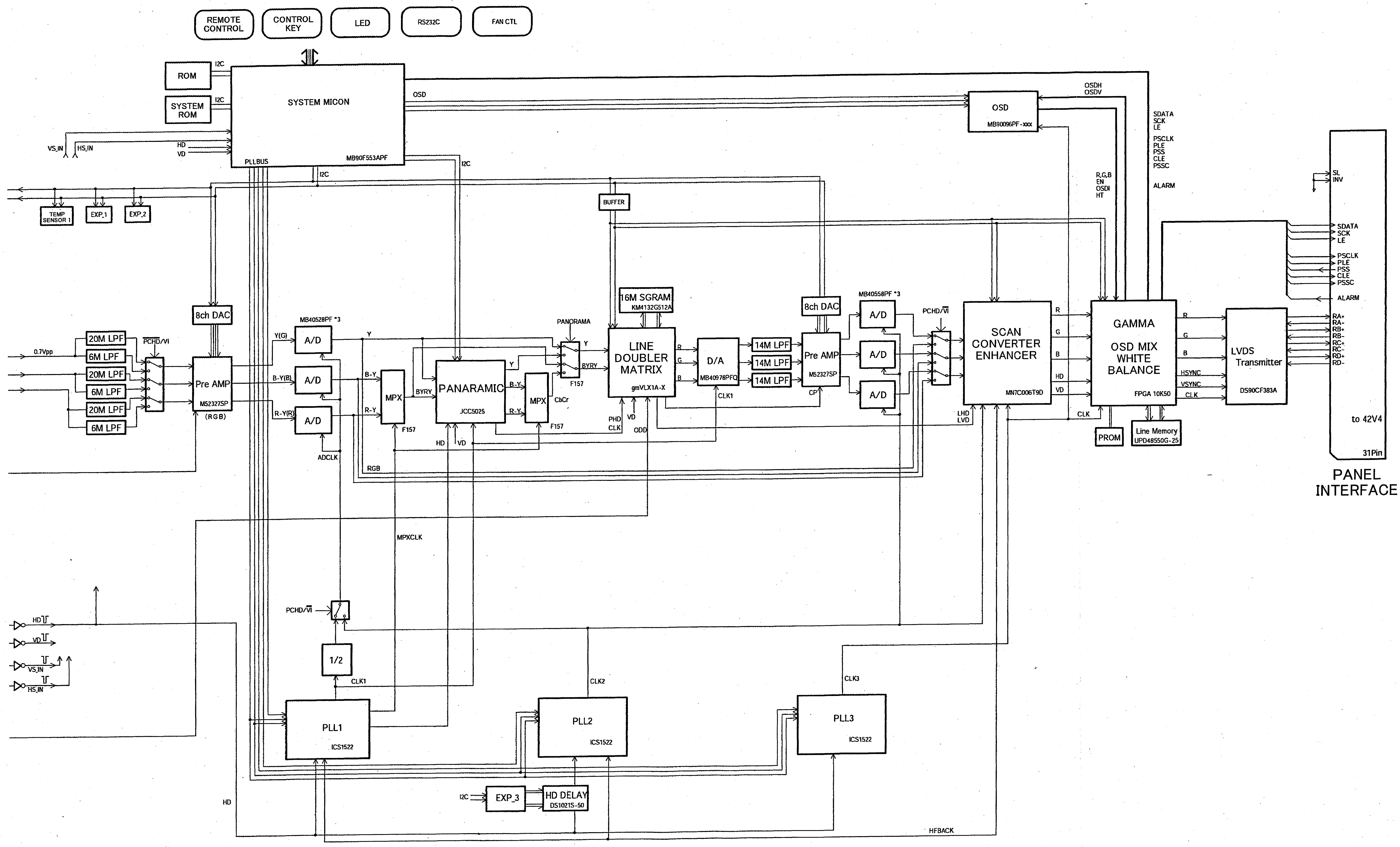
UNIT:[V]

SYMBOL	PAL	VGA
Q602		
E	4.9	–
C	4.7	–
B	0	–
Q603		–
E	4.9	–
C	0	–
B	4.8	–
Q604		–
E	4.9	–
C	0	–
B	4.9	–
Q605		–
E	4.9	–
C	0	–
B	4.8	–
Q606		–
E	4.9	–
C	0	–
B	4.9	–
IC602		
1	0.0	←
2	0.0	←
3	0.0	←
4	0.0	←
5	4.7	←
6	4.7	←
7	0.0	←
8	4.9	←
IC603		
1	3.0	←
2	0.0	←
3	3.0	←
4	0.0	←
5	4.9	←
6	4.9	←
7	0.0	←
8	1.7	←
9	–	←
10	–	←
11	–	←
12	4.9	←
13	4.9	←
14	–	←
15	0.0	←
16	0.0	←
17	0.0	←
18	0.0	←
19	0.0	←
20	0.0	←
21	3.0	←
22	4.9	←
23	0.0	←
24	4.8	←
25	4.8	←
26	4.7	←
27	4.8	←
28	3.0	←
IC604		
1	4.9	←
2	0.0	←
3	0.0	←
4	4.9	←
5	0.0	←
6	0.0	←
7	0.0	←
8	0.0	←
9	0.0	←
10	4.9	←
11	0.0	←
12	0.0	←
13	–	←
14	4.9	←
IC605		
1	4.9	←
2	4.9	←
3	4.9	←
4	4.9	←
5	4.9	←
6	4.9	←
7	4.9	←
8	–	←
9	0.0	←
10	0.0	←
11	–	←
12	0.0	←
13	0.0	←
14	4.9	←
IC606		
1	0.0	←
2	4.9	←
3	0.0	←
4	0.0	←
5	4.9	←
6	0.0	←
7	4.9	←
8	4.9	←
IC601		
1	4.8	←
2	4.8	←
3	4.8	←
4	4.8	←
5	4.8	←
6	4.8	←
7	4.8	←
8	4.9	←
9	4.9	←
10	0.0	←
11	0.0	←
12	4.9	←
13	0.0	←
14	0.0	←
15	0.0	←
16	4.9	←
17	4.9	←
18	4.9	←
19	4.9	←
20	4.8	←
21	4.8	←
22	4.9	←
23	4.9	←
24	4.9	←
25	4.9	←
26	4.9	←
27	3.5	←
28	4.7	←
29	4.7	←
30	4.7	←
31	4.7	←
32	4.7	←
33	4.7	←
34	4.9	←
35	4.9	←
36	0.0	←
37	0.0	←
38	0.0	←
39	4.9	←
40	4.9	←
41	4.9	←
42	0.0	←
43	4.9	←
44	4.8	←
45	0.0	←
46	4.8	←
47	4.6	←
48	4.9	←
49	4.9	←
50	4.8	←
51	0.0	←
52	4.9	←
53	4.9	←
54	4.2	←
55	4.2	←
56	4.2	←
57	4.9	←
58	0.0	←
59	4.5	←
60	4.8	←
61	0.0	←
62	4.7	←
63	4.1	←
64	4.8	←
65	4.8	←
66	0.0	←
67	4.9	←
68	4.8	←
69	4.9	←
70	4.9	←
71	4.9	←
72	4.8	←
73	4.9	←
74	4.9	←
75	0.0	←
76	0.0	←
77	4.9	←
78	0.0	←
79	0.0	←
80	4.9	←
81	0.0	←
82	1.9	←
83	2.3	←
84	4.9	←
85	1.2	0.5
86	4.8	←
87	4.8	←
88	0.0	←
89	0.0	←
90	0.0	←
91	0.0	←
92	4.8	←
93	4.8	←
94	4.9	←
95	4.6	←
96	0.0	←
97	0.0	←
98	4.8	←
99	4.9	←
100	3.2	←
IC607		
1	4.8	–
2	1.3	–
3	4.8	–
4	4.9	–
5	1.5	–
6	0.0	–
7	0.0	–
8	0.0	–
9	4.9	–
10	4.9	–
11	4.9	–
12	0.9	–
13	4.9	–
14	4.9	–
15	4.9	–
16	4.9	–
IC608		
1	4.9	–
2	4.7	–
3	4.7	–
4	0.0	–
5	4.8	–
6	4.8	–
7	4.9	–
8	4.9	–
IC609		
1	4.8	–
2	3.9	–
3	–	–
4	–	–
5	–	–
6	0.0	–
7	0.0	–
8	0.0	–
9	–	–
10	4.9	–
11	4.2	–
12	4.9	–
13	3.9	–
14	3.9	–
15	4.8	–
16	4.9	–
IC610		
1	4.9	←
2	4.6	←
3	4.6	←
4	0.0	←
5	4.9	←
6	4.8	←
7	4.9	←
8	4.9	←
IC611		
1	0.0	–
2	0.0	–
3	0.0	–
4	0.0	–
5	0.0	–
6	0.0	–
7	0.0	–
8	0.0	–
9	0.0	–
10	0.0	–
11	0.0	–
12	0.0	–
13	0.0	–
14	4.8	–
15	4.8	–
16	4.9	–
IC612		
1	4.8	–
2	4.8	–
3	–	–
4	0.0	–
5	4.9	–
6	4.9	–
7	0.0	–
8	4.9	–
IC613		
1	4.8	←
2	4.9	←
3	–	←
4	0.0	←
IC614		
1	5.9	←
2	0.0	←
3	5.0	←
IC614		
1	13.2	←
2	0.0	←
3	12.0	←
IC621		
1	4.9	–
2	4.9	–
3	4.9	–
4	0.0	–
5	4.5	–
6	4.5	–
7	4.9	–
8	4.9	–

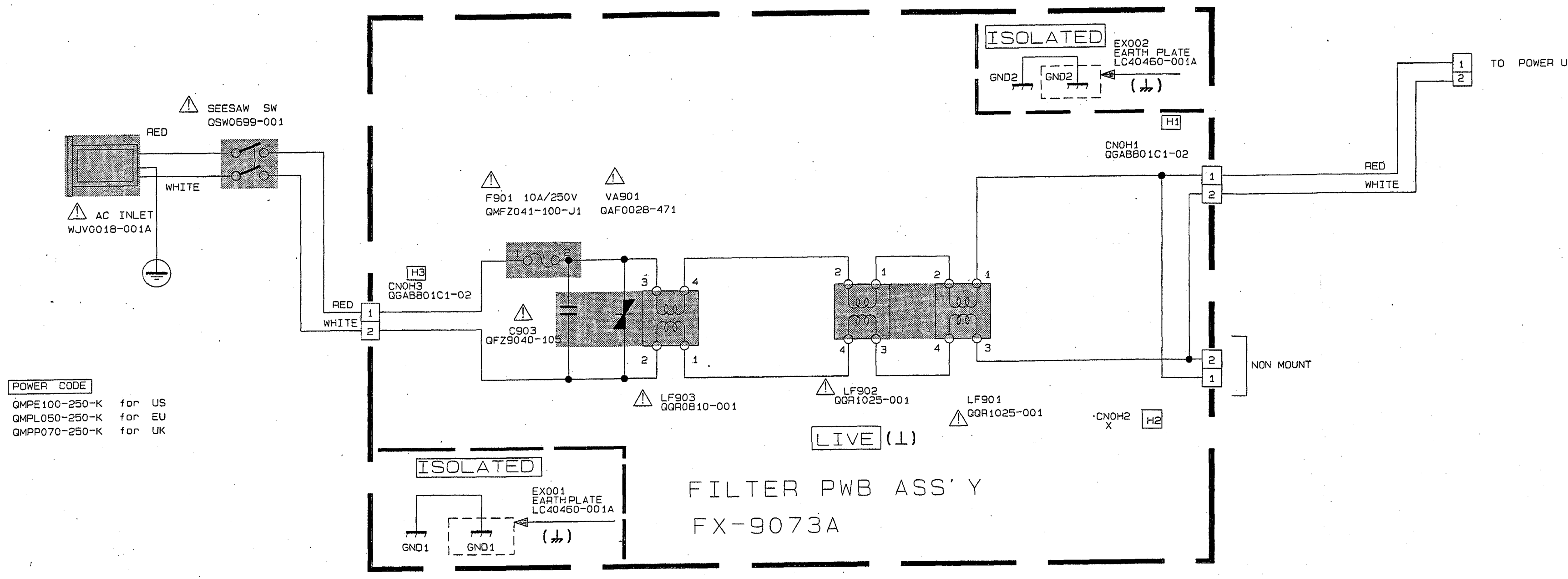
BLOCK DIAGRAM (ANALOG)


NTSC/PAL
4fsc
fsc
I2C
BUFFER
SCL
SDA
TEMP SENSOR 2
EXP.3
EXP.4
VIDEO A
VIDEO B
NJM2245
A/B
Y/C SEPARATOR SBX1745-01
Y
C
1/2
THRU
COMPOSIT
CHROMA DECODER TB1227CN
CORELING
Y/C
YCDET
NJM2245
COMPONENT
B-Y
R-Y
M1
M2
RGB PROCESSOR AN5392FBS
RGB:100% = 0.7Vpp
R/R-Y
G/Y
B/B-Y
COMPO.
Y
B-Y/Pb
R-Y/Pr
B-Y/Pb
R-Y/Pr
Analog SW AN5862
TERM/UNIT
A/B
Analog SW AN5862
VIDEO/PCHD
CP
VD
RGB
R
G
B
Analog SW AN5862
BNC/DSUB
Analog SW AN5862
RGB/COMP
HD
VD
I2C
RGB/COMP
LPF
SYNC1
SYNC2
HD3
VD3
CP
HD1
VD1
DAC1(VS)
DAC2(HS/CS)
HD2
VD2
TA1318N
SYNC SEPARATOR
M52346SP
SYNC SEPARATOR (RGB INPUT)
CS+
VD+
HD/HD
VD/VD
BNC/DSUB
MM
LPF
HD
VD
VS_IN
HS_IN
MICRO PROCESSOR
MM 30 μ sec width
MM 15 μ sec delay
D
Q
CLK
ODD
I/P
VIDEO A
VIDEO B
COMPO.
RGB
OUT
Audio-L
Audio-R
I2C
AUDIO SW MN1311BD
AMP
AMP
EXT. SPEAKER
SPEAKER
6V
SW REG. 13V→6V
5V
175V
70V
DIVIDER
13V
D5V
STB13.5V
STB5V
FAN12V
15V
パネル5V
175V
70V
AC IN
LINE FILTER
POWER UNIT

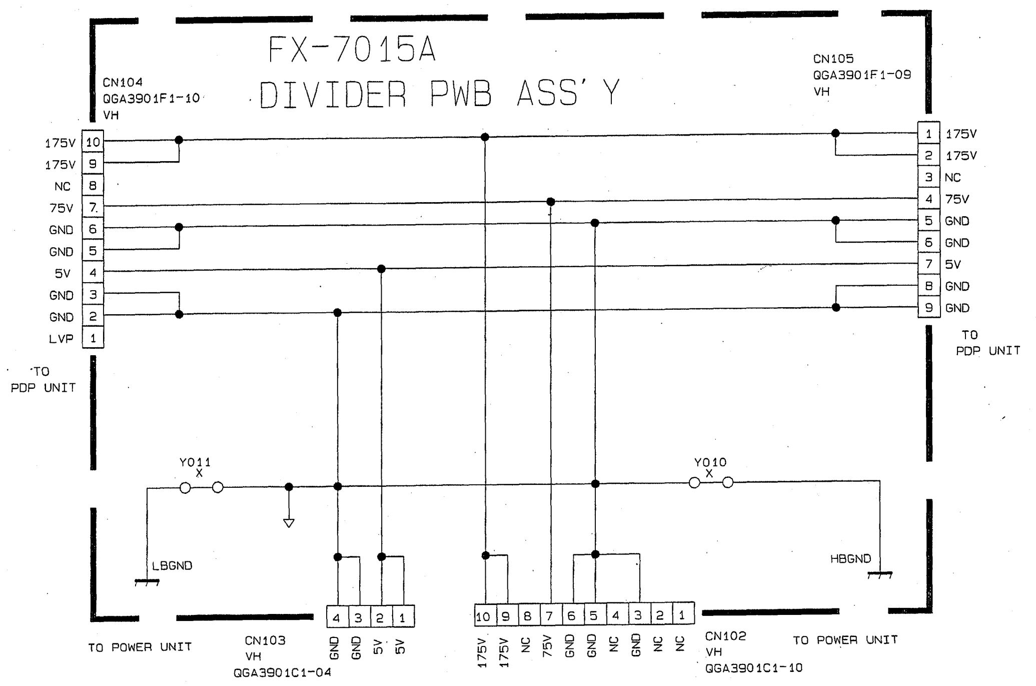
BLOCK DIAGRAM (DIGITAL)


REMOTE CONTROL
CONTROL KEY
LED
RS232C
FAN CTL
ROM
SYSTEM ROM
I2C
SYSTEM MICON
MB90F553APF
PLLBUS
OSD
VS_IN
HS_IN
HD
VD
TEMP SENSOR 1
EXP_1
EXP_2
BUFFER
OSD
MB90096PF-xxx
OSDH
OSDV
SDATA
SCK
LE
PSCLK
PLE
PSS
CLE
PSSC
ALARM
R,G,B
EN
OSDI
HT
SL
INV
0.7Vpp
20M LPF
6M LPF
PCHD/VI
8ch DAC
Pre AMP
M52327SP
(RGB)
MB40528PF *3
Y(G)
B-Y(B)
R-Y(R)
A/D
ADCLK
Y
B-Y
R-Y
MPX
F157
BYRY
PANARAMIC
JCC5025
CbCr
PANORAMA
16M SGRAM
KM4132G512A
LINE DOUBLER MATRIX
gmVLX1A-X
PHD
CLK
VD
ODD
D/A
MB40978PFQ
CLK1
14M LPF
8ch DAC
Pre AMP
M52327SP
CP
MB40558PF *3
SCAN CONVERTER ENHANCER
MN7C006T9D
LHD
LVD
GAMMA
OSD MIX
WHITE BALANCE
FPGA 10K50
PROM
Line Memory
UPD48550G-25
HSYNC
VSYNC
CLK
LVDS Transmitter
DS90CF383A
RA+
RA-
RB+
RB-
RC+
RC-
RD+
RD-
to 42V4
31Pin
PANEL INTERFACE
RGB
MPXCLK
1/2
PLL1
ICS1522
PLL2
ICS1522
PLL3
ICS1522
CLK2
CLK3
EXP_3
HD DELAY
DS1021S-50
HFBACK

CIRCUIT DIAGRAMS *[FILTER PWB CIRCUIT DIAGRAM]*

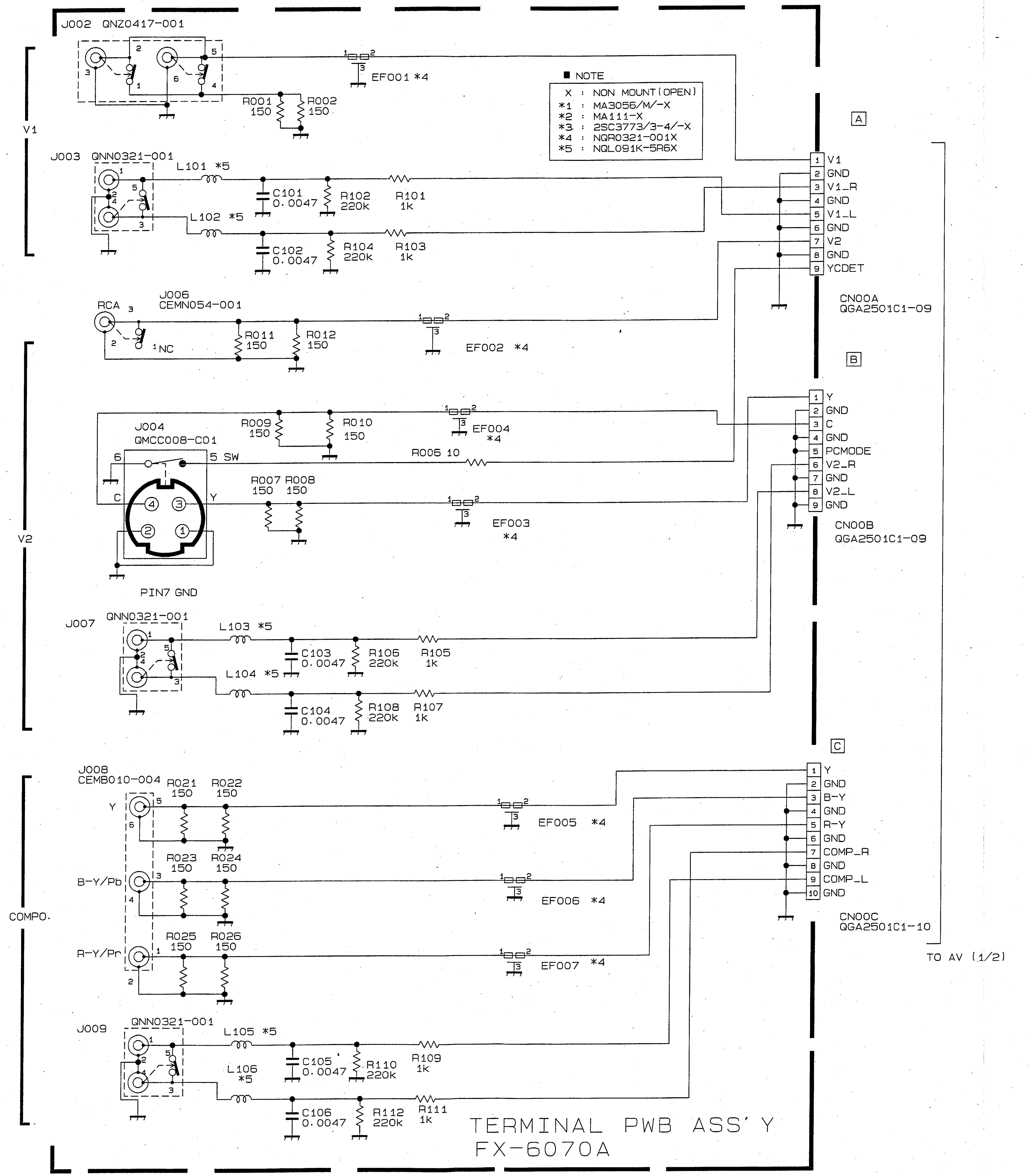

SEESAW SW
QSW0699-001
RED
WHITE
AC INLET
WJV0018-001A
POWER CODE
QMPE100-250-K for US
QMPL050-250-K for EU
QMPP070-250-K for UK
RED
WHITE
1
2
H3
CN0H3
QGAB801C1-02
F901 10A/250V
QMFZ041-100-J1
VA901
QAF0028-471
C903
QFZ9040-105
LF903
QQR0810-001
LF902
QQR1025-001
LF901
QQR1025-001
LIVE (⊥)
ISOLATED
EX002
EARTH PLATE
LC40460-001A
GND2
GND2
H1
CN0H1
QGAB801C1-02
CN0H2
H2
NON MOUNT
RED
WHITE
TO POWER UNIT
ISOLATED
EX001
EARTH PLATE
LC40460-001A
GND1
GND1
FILTER PWB ASS' Y
FX-9073A

[DIVIDER PWB CIRCUIT DIAGRAM]


FX-7015A
DIVIDER PWB ASS' Y
CN104
QGA3901F1-10
VH
175V 10
175V 9
NC 8
75V 7
GND 6
GND 5
5V 4
GND 3
GND 2
LVP 1
TO
PDP UNIT
CN105
QGA3901F1-09
VH
1 175V
2 175V
3 NC
4 75V
5 GND
6 GND
7 5V
8 GND
9 GND
TO
PDP UNIT
Y011
Y010
LBGND
HBGND
TO POWER UNIT
CN103
VH
QGA3901C1-04
4 GND
3 GND
2 5V
1 5V
10 175V
9 175V
8 NC
7 75V
6 GND
5 GND
4 NC
3 GND
2 NC
1 NC
CN102
VH
QGA3901C1-10
TO POWER UNIT

[TERMINAL PWB CIRCUIT DIAGRAM]

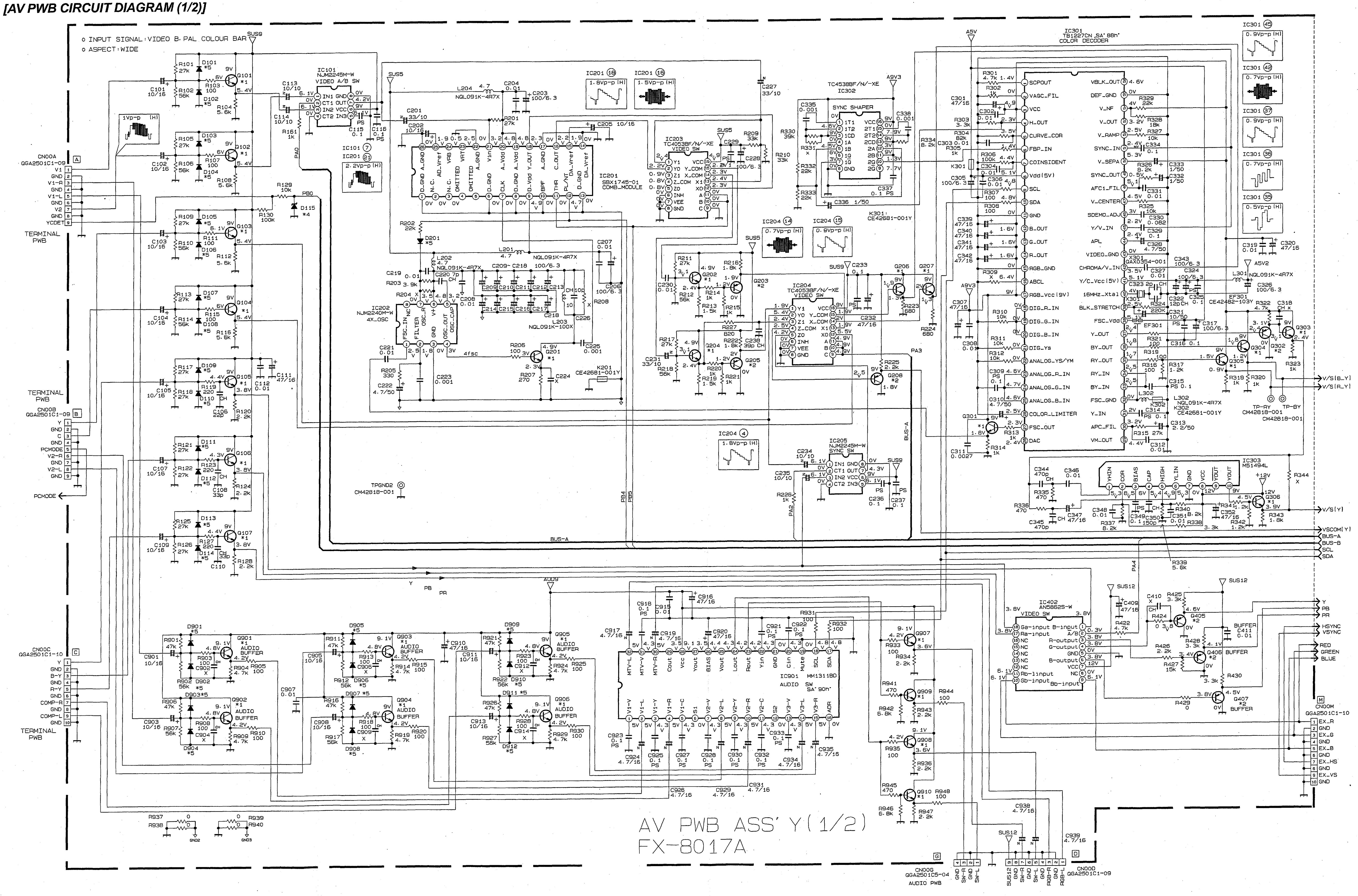
GD-V4210PZW&GD-V4210PZW-G


J002 QNZ0417-001
EF001 *4
R001 150
R002 150
V1
■ NOTE
X : NON MOUNT(OPEN)
*1 : MA3056/M/-X
*2 : MA111-X
*3 : 2SC3773/3-4/-X
*4 : NQR0321-001X
*5 : NQL091K-5R6X
J003 QNN0321-001
L101 *5
C101 0.0047
R102 220k
R101 1k
L102 *5
C102 0.0047
R104 220k
R103 1k
A
1 V1
2 GND
3 V1_R
4 GND
5 V1_L
6 GND
7 V2
8 GND
9 YCDET
CN00A QGA2501C1-09
RCA
J006 CEMN054-001
NC
R011 150
R012 150
EF002 *4
B
1 Y
2 GND
3 C
4 GND
5 PCMODE
6 V2_R
7 GND
8 V2_L
9 GND
CN00B QGA2501C1-09
J004 QMCC008-C01
R009 150
R010 150
EF004 *4
5 SW
R006 10
R007 R008 150 150
EF003 *4
V2
PIN7 GND
J007 QNN0321-001
L103 *5
C103 0.0047
R106 220k
R105 1k
L104 *5
C104 0.0047
R108 220k
R107 1k
C
1 Y
2 GND
3 B-Y
4 GND
5 R-Y
6 GND
7 COMP_R
8 GND
9 COMP_L
10 GND
CN00C QGA2501C1-10
TO AV (1/2)
J008 CEMB010-004
Y
R021 150
R022 150
EF005 *4
B-Y/Pb
R023 150
R024 150
EF006 *4
COMPO.
R-Y/Pr
R025 150
R026 150
EF007 *4
J009 QNN0321-001
L105 *5
C105 0.0047
R110 220k
R109 1k
L106 *5
C106 0.0047
R112 220k
R111 1k
TERMINAL PWB ASS'Y
FX-6070A

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

[AV PWB CIRCUIT DIAGRAM (1/2)]

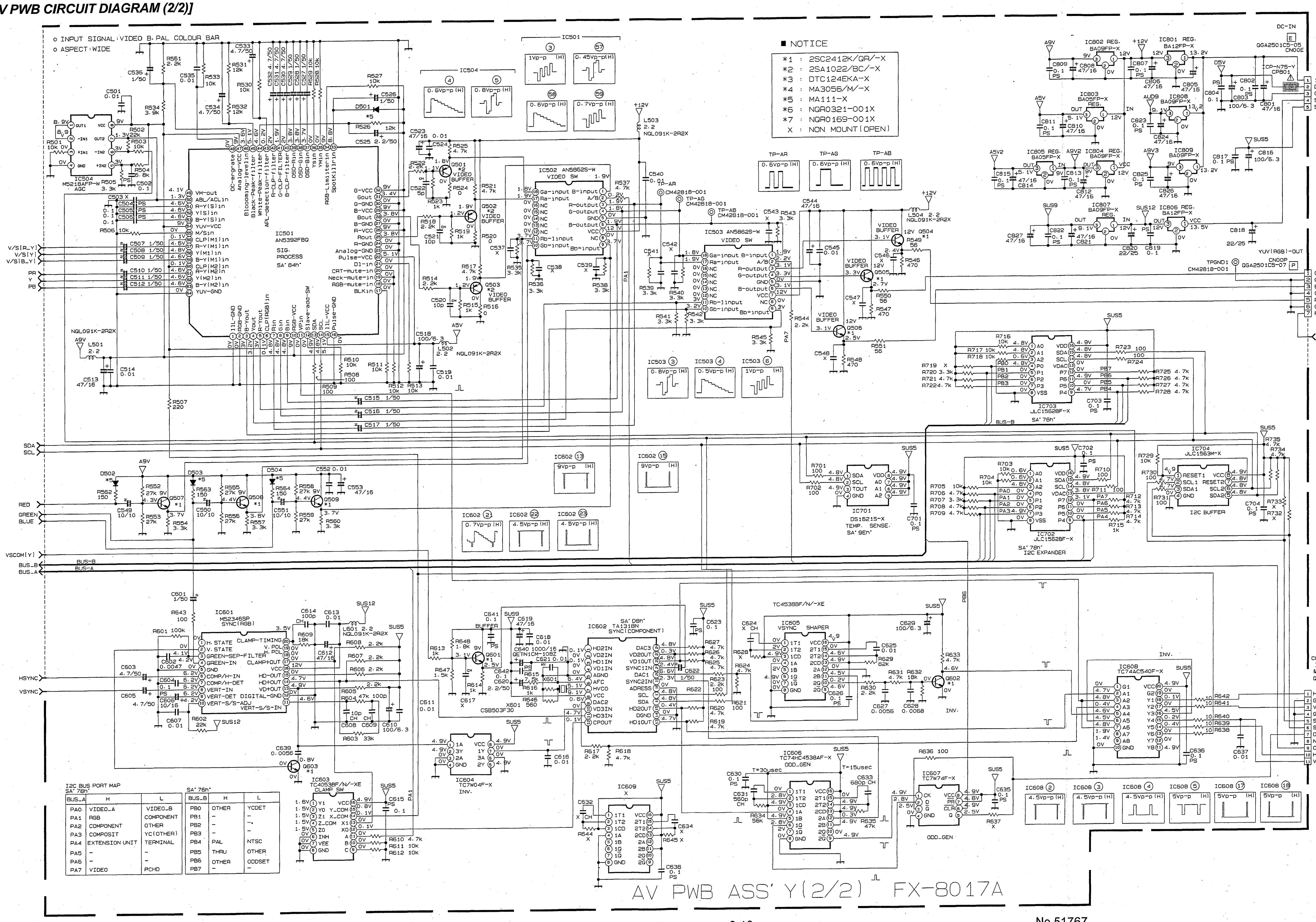


o INPUT SIGNAL:VIDEO B.PAL COLOUR BAR
o ASPECT:WIDE
CN00A QGA2501C1-09
TERMINAL PWB
CN00B QGA2501C1-09
CN00C QGA2501C1-10
PCMODE
IC101 NJM2245M-W VIDEO A/B SW
IC201 SBX1745-01 COMB_MODULE
IC202 NJM2240M-W 4X_OSC
IC203 TC4053BF/N/-XE VIDEO SW
IC204 TC4053BF/N/-XE VIDEO SW
IC205 NJM2245M-W SYNC SW
IC302 TC4538BF/N/-XE SYNC SHAPER
IC301 TB1227CN_SA'88n' COLOR DECODER
IC303 M51494L
IC402 AN5862S-W VIDEO SW
IC901 MM1311BD AUDIO SW
AUDIO BUFFER
BUFFER
BUS-A
BUS-B
SCL
SDA
V/S(B_Y)
V/S(R_Y)
V/S(Y)
VSCOM(Y)
Y
PB
PR
HSYNC
VSYNC
RED
GREEN
BLUE
CN00M QGA2501C1-10
CN00G QGA2501C5-04 AUDIO PWB
CN00D QGA2501C1-09
TPGND2 CM42818-001
TP-RY CM42818-001
TP-BY CM42818-001
AV PWB ASS'Y(1/2)
FX-8017A

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

[AV PWB CIRCUIT DIAGRAM (2/2)]


o INPUT SIGNAL: VIDEO B, PAL COLOUR BAR
o ASPECT: WIDE
IC501 AN5392FBQ SIG. PROCESS SA' 84h'
IC502 AN5862S-W VIDEO SW
IC503 AN5862S-W VIDEO SW
IC504 M5218AFP-W AGC
IC601 M52346SP SYNC(RGB)
IC602 TA1318N SYNC(COMPONENT) SA' D8h'
IC603 TC4053BF/N/-XE CLAMP SW
IC604 TC7W04F-X INV.
IC605 TC4538BF/N/-XE VSYNC SHAPER
IC606 TC74HC4538AF-X ODD_GEN
IC607 TC7W74F-X ODD_GEN
IC608 TC74AC540F-X INV.
IC609
IC701 DS1621S-X TEMP. SENSE. SA' 9Eh'
IC702 JLC1562BF-X SA' 78h' I2C EXPANDER
IC703 JLC1562BF-X SA' 76h'
IC704 JLC1563M-X I2C BUFFER
IC801 REG. BA12FP-X
IC802 REG. BA09FP-X
IC803 BA05FP-X REG.
IC804 REG. BA09FP-X
IC805 REG. BA05FP-X
IC806 REG. BA12FP-X
IC807 BA09FP-X REG.
IC808 BA09FP-X
IC809 BA09FP-X
DC-IN CN00E QGA2501C5-05
13V D5V GND STB13V STB5V
YUV(RGB)-OUT CN00P QGA2501C5-07
G(Y) GND B(U) GND R(V) GND PCMODE
CN00F I2C &SYNC-OUT QGA2501C1-11
HS GND VS GND SCL SDA GND NC CLP HS_IN VS_IN
V/S(R_Y) V/S(Y) V/S(B_Y)
PR Y PB
SDA SCL
RED GREEN BLUE
VSCOM(Y)
BUS_B BUS_A
HSYNC VSYNC
TP-AR 0.6Vp-p (H)
TP-AG 0.6Vp-p (H)
TP-AB 0.6Vp-p (H)
AV PWB ASS' Y(2/2) FX-8017A

■ NOTICE

*1	:	2SC2412K/QR/-X
*2	:	2SA1022/BC/-X
*3	:	DTC124EKA-X
*4	:	MA3056/M/-X
*5	:	MA111-X
*6	:	NQR0321-001X
*7	:	NQR0169-001X
X	:	NON MOUNT(OPEN)

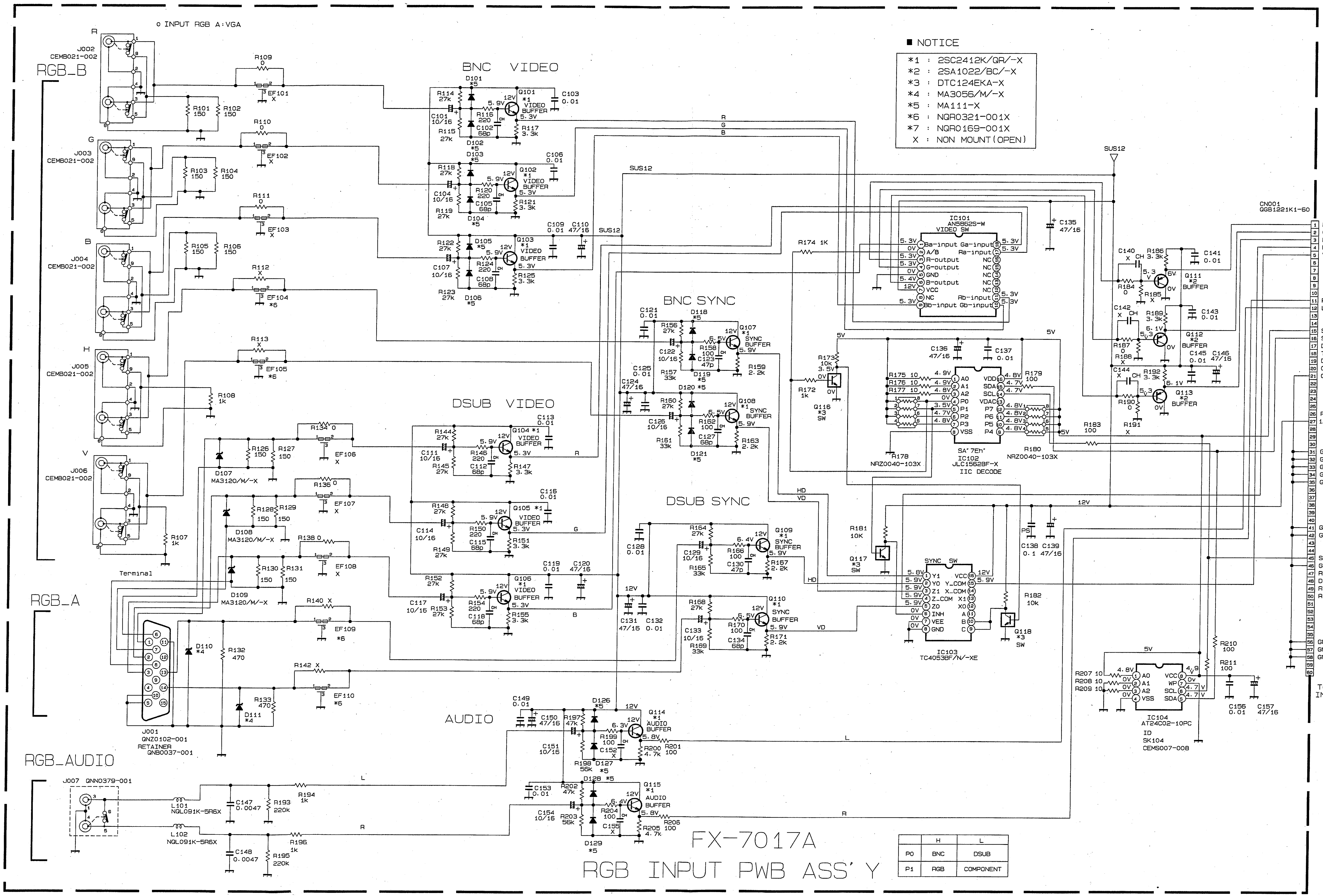
I2C BUS PORT MAP
SA' 78h'

BUS_A	H	L
PA0	VIDEO_A	VIDEO_B
PA1	RGB	COMPONENT
PA2	COMPONENT	OTHER
PA3	COMPOSIT	YC(OTHER)
PA4	EXTENSION UNIT	TERMINAL
PA5	–	–
PA6	–	–
PA7	VIDEO	PCHD

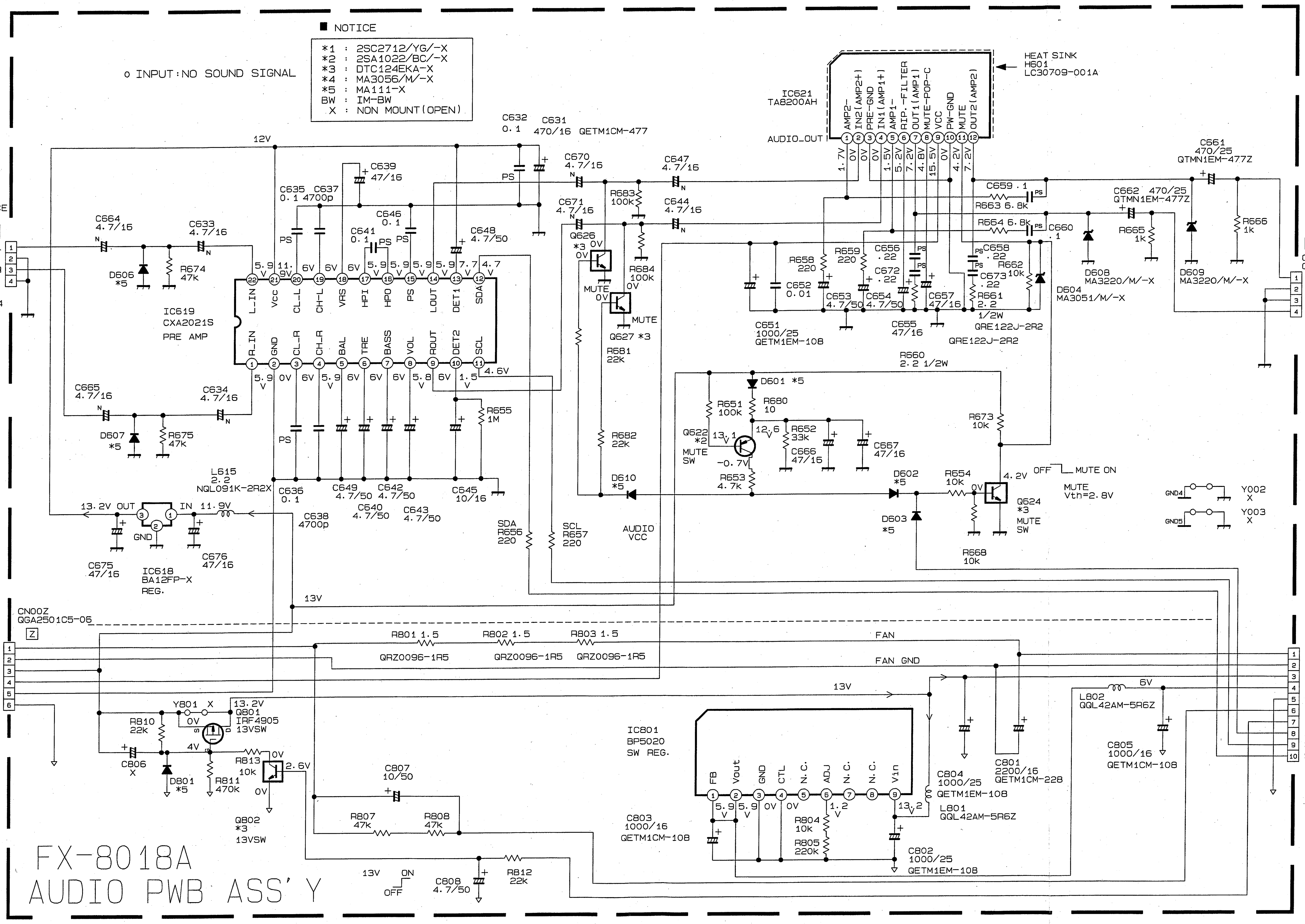
SA' 76h'

BUS_B	H	L
PB0	OTHER	YCDET
PB1	–	–
PB2	–	–
PB3	–	–
PB4	PAL	NTSC
PB5	THRU	OTHER
PB6	OTHER	ODDSET
PB7	–	–

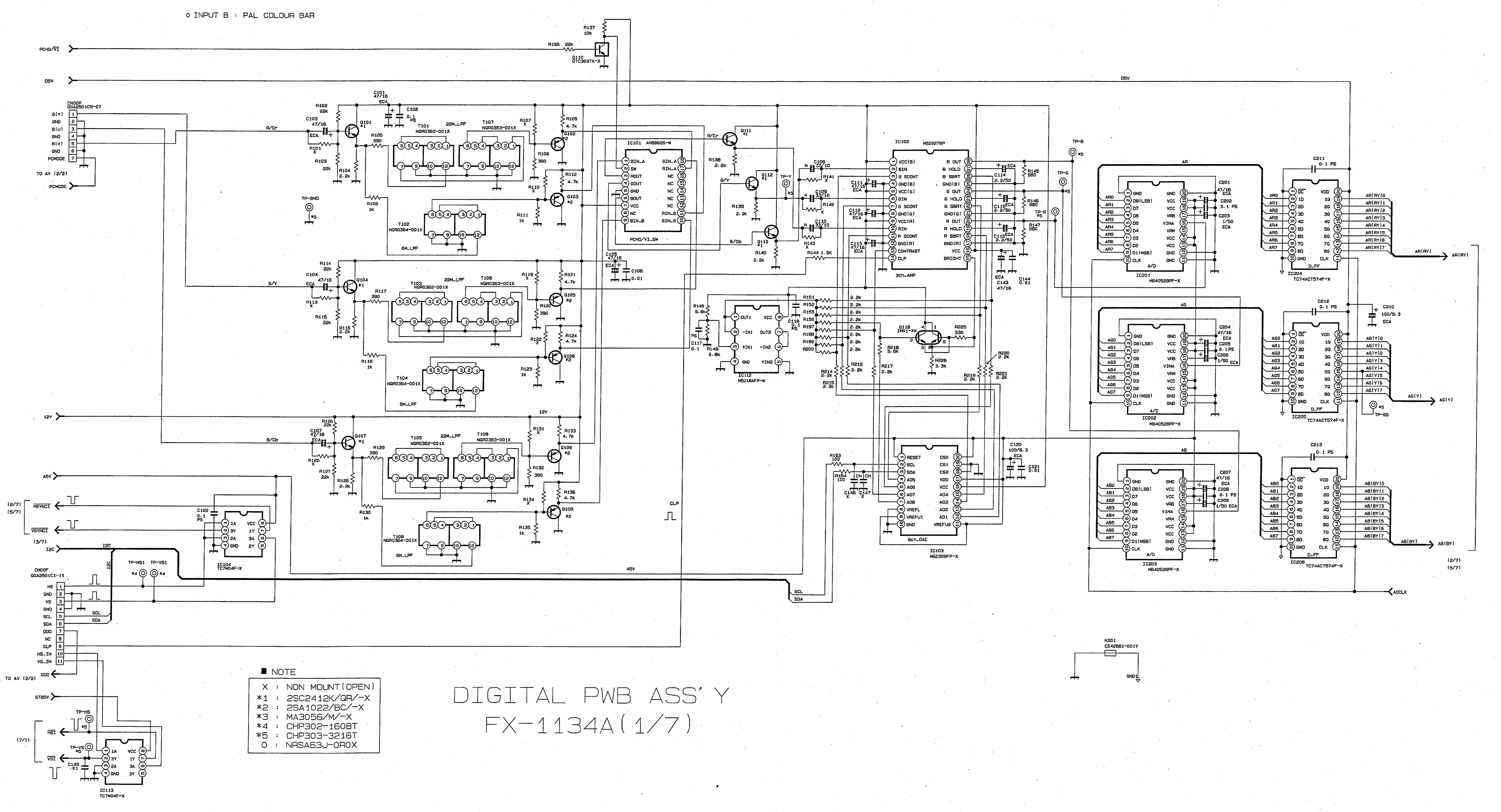
[RGB INPUT PWB CIRCUIT DIAGRAM]


o INPUT RGB A:VGA
RGB_B
RGB_A
RGB_AUDIO
BNC VIDEO
BNC SYNC
DSUB VIDEO
DSUB SYNC
AUDIO
■ NOTICE
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : DTC124EKA-X
*4 : MA3056/M/-X
*5 : MA111-X
*6 : NQR0321-001X
*7 : NQR0169-001X
X : NON MOUNT(OPEN)
J002 CEMB021-002
J003 CEMB021-002
J004 CEMB021-002
J005 CEMB021-002
J006 CEMB021-002
J001 QNZ0102-001 RETAINER QNB0037-001
J007 QNN0379-001
Terminal
IC101 AN5862S-W VIDEO SW
IC102 JLC1562BF-X IIC DECODE
IC103 TC4053BF/N/-XE
IC104 AT24C02-10PC
ID SK104 CEMS007-008
CN001 QGB1221K1-60
R/PR
G/Y
B/PB
HD
VD
R
L
STB5V
SDA
DCD
TD
DSR
CTS
GND
REMOCON 12V
SCL
RD
DTR
RTS
RI
TO INTERFACE
SUS12
VIDEO BUFFER
SYNC BUFFER
AUDIO BUFFER
BUFFER
FX-7017A
RGB INPUT PWB ASS'Y
	H	L
P0	BNC	DSUB
P1	RGB	COMPONENT

[AUDIO PWB CIRCUIT DIAGRAM]


■ NOTICE
*1 : 2SC2712/YG/-X
*2 : 2SA1022/BC/-X
*3 : DTC124EKA-X
*4 : MA3056/M/-X
*5 : MA111-X
BW : IM-BW
X : NON MOUNT(OPEN)
o INPUT:NO SOUND SIGNAL
TO INTERFACE
G
SW_L
GND
SW_R
GND
CN00G
QGA2501C5-04
12V
C664 4.7/16
C633 4.7/16
D606 *5
R674 47k
IC619
CXA2021S
PRE AMP
L_IN
Vcc
CL_L
CH_L
VRS
HPI
HPO
PS
LOUT
DET1
SDA
R_IN
GND
CL_R
CH_R
BAL
TRE
BASS
VOL
ROUT
DET2
SCL
C665 4.7/16
C634 4.7/16
D607 *5
R675 47k
C635 0.1
C637 4700p
C639 47/16
C646 0.1
C641 0.1
C648 4.7/50
C632 0.1
C631 470/16 QETM1CM-477
C670 4.7/16
C671 4.7/16
C647 4.7/16
C644 4.7/16
R683 100k
R684 100k
Q626 *3
Q627 *3
MUTE
R581 22k
R682 22k
D610 *5
R655 1M
L615 2.2 NQL091K-2R2X
C636 0.1
C638 4700p
C649 4.7/50
C640 4.7/50
C642 4.7/50
C643 4.7/50
C645 10/16
13.2V OUT
IN 11.9V
GND
IC618 BA12FP-X REG.
C675 47/16
C676 47/16
SDA R656 220
SCL R657 220
AUDIO VCC
13V
IC621 TA8200AH
AUDIO_OUT
AMP2-
IN2(AMP2+)
PRE-GND
IN1(AMP1+)
AMP1-
RIP.-FILTER
OUT1(AMP1)
MUTE-POP-C
VCC
PW-GND
MUTE
OUT2(AMP2)
HEAT SINK H601 LC30709-001A
C659 .1
R663 6.8K
R664 6.8K
C660 .1
C661 470/25 QTMN1EM-477Z
C662 470/25 QTMN1EM-477Z
R665 1k
R666 1k
D608 MA3220/M/-X
D609 MA3220/M/-X
D604 MA3051/M/-X
TO REMOTE
W
CN00W
QGA2501C5-04
LOUT
GND
GND
ROUT
R658 220
R659 220
C652 0.01
C651 1000/25 QETM1EM-108
C653 4.7/50
C654 4.7/50
C656 .22
C672 .22
C655 47/16
C657 47/16
C658 .22
C673 .22
R662 10k
R661 2.2 1/2W
QRE122J-2R2
R660 2.2 1/2W
D601 *5
R651 100k
R680 10
Q622 *2
MUTE SW
R652 33k
C666 47/16
C667 47/16
R653 4.7k
R673 10k
D602 *5
D603 *5
R654 10k
R668 10k
Q624 *3
MUTE SW
OFF MUTE ON
MUTE Vth=2.8V
GND4
GND5
Y002 X
Y003 X
TO POWER UNIT
CN00Z
QGA2501C5-06
Z
FAN_VO
FAN_GND
13V
AUDIO
AUDIO_GND
GND
R801 1.5
R802 1.5
R803 1.5
QRZ0096-1R5
FAN
FAN GND
Y801 X
R810 22k
Q801 IRF4905 13VSW
C806 X
D801 *5
R811 470k
R813 10k
Q802 *3 13VSW
C807 10/50
R807 47k
R808 47k
C808 4.7/50
R812 22k
13V ON OFF
IC801
BP5020
SW REG.
FB
Vout
GND
CTL
N.C.
ADJ
N.C.
N.C.
Vin
C803 1000/16 QETM1CM-108
R804 10k
R805 220k
C802 1000/25 QETM1EM-108
C804 1000/25 QETM1EM-108
L801 QQL42AM-5R6Z
C801 2200/16 QETM1CM-228
L802 QQL42AM-5R6Z
C805 1000/16 QETM1CM-108
TO DIGITAL
FAN
FAN_GND
13V
6V
GND
FANCTL
12VON
AMUTE
SCL
SDA
H
CN00H
QGA2501C1-10
FX-8018A
AUDIO PWB ASS'Y

[DIGITAL PWB CIRCUIT DIAGRAM (1/7)]

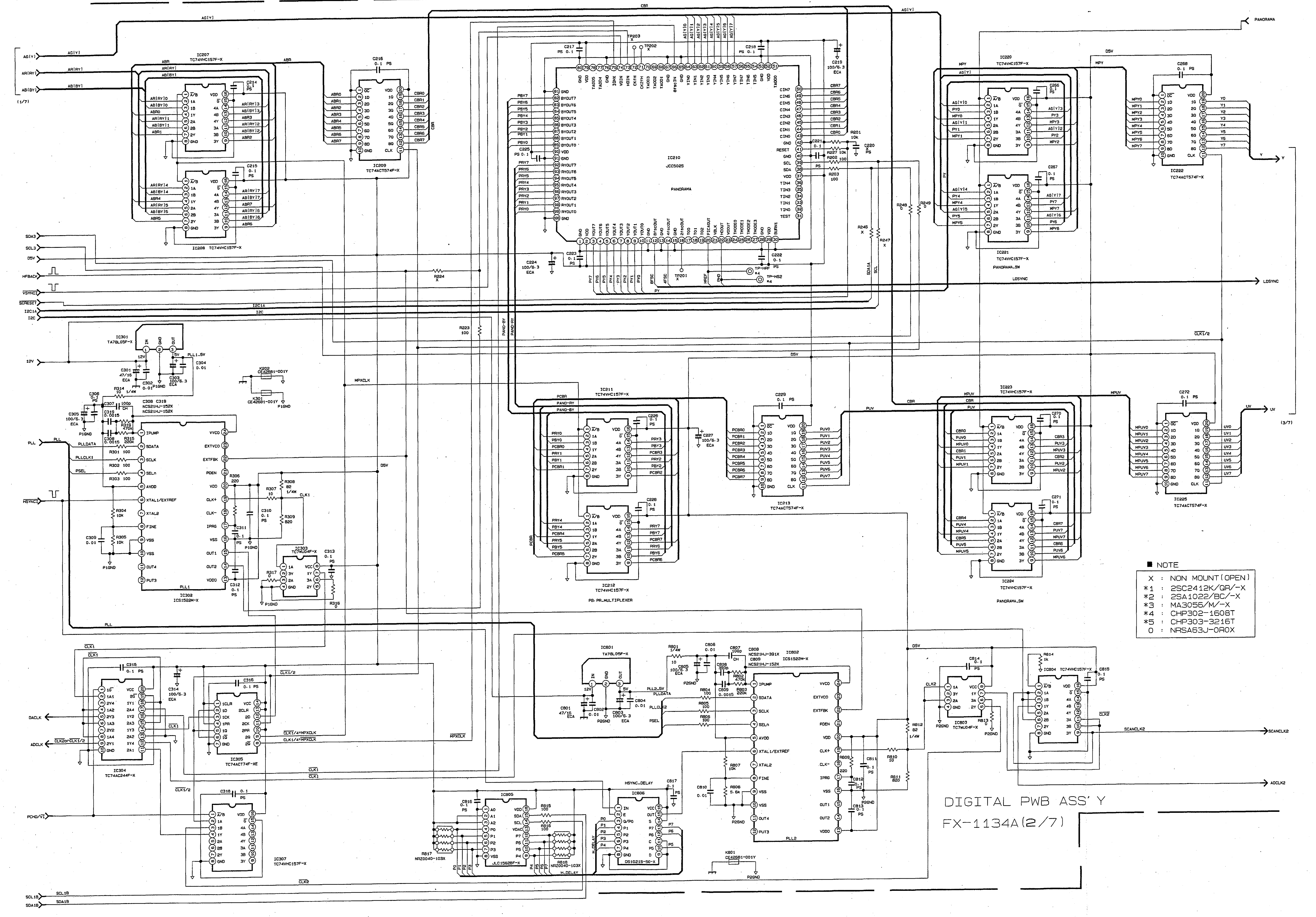

o INPUT B : PAL COLOUR BAR
PCHD/VI
D5V
12V
A5V
CN00P GGA2501C5-07
G(Y)
GND
B(U)
GND
R(V)
GND
PCMODE
TO AV (2/2)
PCMODE
R/Cr
G/Y
B/Cb
IC101 AN5862S-W
PCHD/VI_SW
IC102 M52327SP
3ch_AMP
IC103 M62399FP-X
8ch_DAC
IC112 M5218AFP-W
IC104 TC7W04F-X
IC113 TC7W04F-X
IC201 MB40528PF-X
IC202 MB40528PF-X
IC203 MB40528PF-X
IC204 TC74ACT574F-X
IC205 TC74ACT574F-X
IC206 TC74ACT574F-X
A/D
D_FF
AR(RY)
AG(Y)
AB(BY)
ADCLK
(2/7)
(5/7)
HSYNCI
VSYNCI
(3/7)
I2C
SCL
SDA
CN00F GGA2501C1-11
HS
GND
VS
GND
SCL
SDA
ODD
NC
CLP
HS_IN
VS_IN
TO AV (2/2)
ODD
STB5V
(7/7)
HSI
VSI
TP-HS
TP-VS
TP-HS1
TP-VS1
TP-GND
TP-B
TP-G
TP-R
TP-G5
CLP
6M_LPF
22M_LPF
T101 NQR0362-001X
T107 NQR0363-001X
T102 NQR0364-001X
T103 NQR0362-001X
T108 NQR0363-001X
T104 NQR0364-001X
T105 NQR0362-001X
T109 NQR0363-001X
T106 NQR0364-001X
Q110 DTC363TK-X
K201 CE42681-001Y
GND1

■ NOTE

X	:	NON MOUNT(OPEN)
*1	:	2SC2412K/QR/-X
*2	:	2SA1022/BC/-X
*3	:	MA3056/M/-X
*4	:	CHP302-1608T
*5	:	CHP303-3216T
O	:	NRSA63J-0R0X

DIGITAL PWB ASS'Y
FX-1134A(1/7)

[DIGITAL PWB CIRCUIT DIAGRAM (2/7)]


AG(Y)
AR(RY)
AB(BY)
(1/7)
IC207 TC74VHC157F-X
IC208 TC74VHC157F-X
IC209 TC74ACT574F-X
IC210 JCC5025 PANORAMA
IC220 TC74VHC157F-X
IC221 TC74VHC157F-X PANORAMA_SW
IC222 TC74ACT574F-X
IC211 TC74VHC157F-X
IC212 TC74VHC157F-X PB·PR_MULTIPLEXER
IC213 TC74ACT574F-X
IC223 TC74VHC157F-X
IC224 TC74VHC157F-X PANORAMA_SW
IC225 TC74ACT574F-X
IC301 TA78L05F-X
IC302 ICS1522M-X PLL1
IC303 TC7WU04F-X
IC304 TC74AC244F-X
IC305 TC74ACT74F-XE
IC307 TC74VHC157F-X
IC801 TA78L05F-X
IC802 ICS1522M-X PLL2
IC803 TC7WU04F-X
IC804 TC74VHC157F-X
IC805 JLC1562BF-X
IC806 DS1021S-50-X
SDA3
SCL3
D5V
HFBACK
VSYNC
SCRESET
I2C1A
I2C
12V
PLL
HSYNC
DACLK
ADCLK
PCHD/V1
SCL1B
SDA1B
PANORAMA
Y
UV
(3/7)
LDSYNC
CLK1/2
SCANCLK2
ADCLK2
MPXCLK
HSYNC_DELAY
H_DELAY

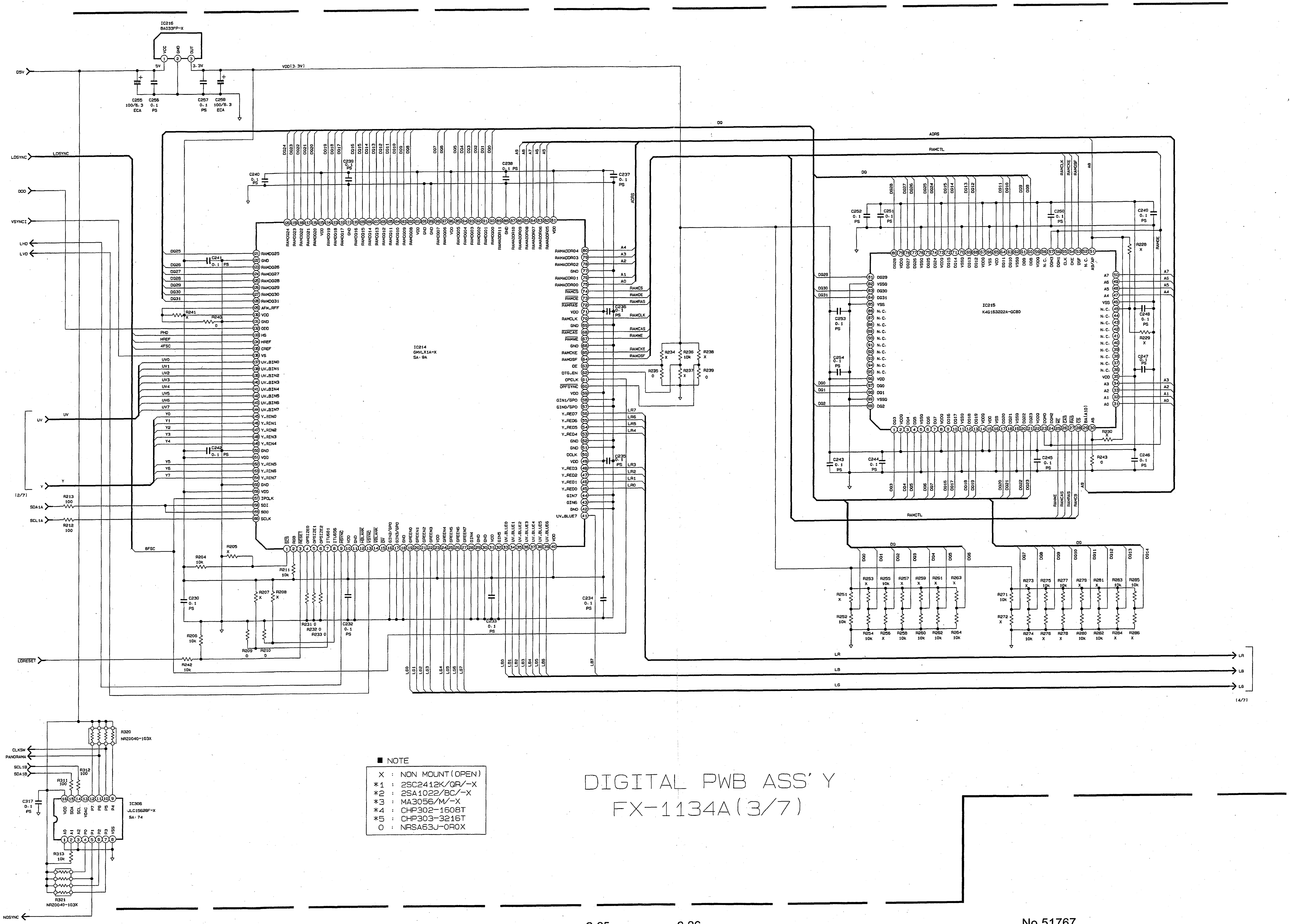
■ NOTE

X	:	NON MOUNT(OPEN)
*1	:	2SC2412K/QR/-X
*2	:	2SA1022/BC/-X
*3	:	MA3056/M/-X
*4	:	CHP302-1608T
*5	:	CHP303-3216T
0	:	NRSA63J-0R0X

DIGITAL PWB ASS'Y
FX-1134A(2/7)

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

[DIGITAL PWB CIRCUIT DIAGRAM (3/7)]


IC216
BA033FP-X
VCC
GND
OUT
5V
3.3V
VDD(3.3V)
C255 100/6.3 ECA
C256 0.1 PS
C257 0.1 PS
C258 100/6.3 ECA
D5V
LDSYNC
ODD
VSYNCI
LHD
LVD
UV
Y
(2/7)
SDA1A
SCL1A
R213 100
R212 100
LDRESET
IC214
GMVLX1A-X
SA:9A
IC215
K4G163222A-QC80
DQ
ADRS
RAMCTL
LR
LB
LG
(4/7)
R320
NRZ0040-103X
CLKSW
PANORAMA
SCL1B
SDA1B
R312 100
R311 100
C317 0.1 PS
IC306
JLC1562BF-X
SA:74
R313 10k
R321
NRZ0040-103X
NOSYNC

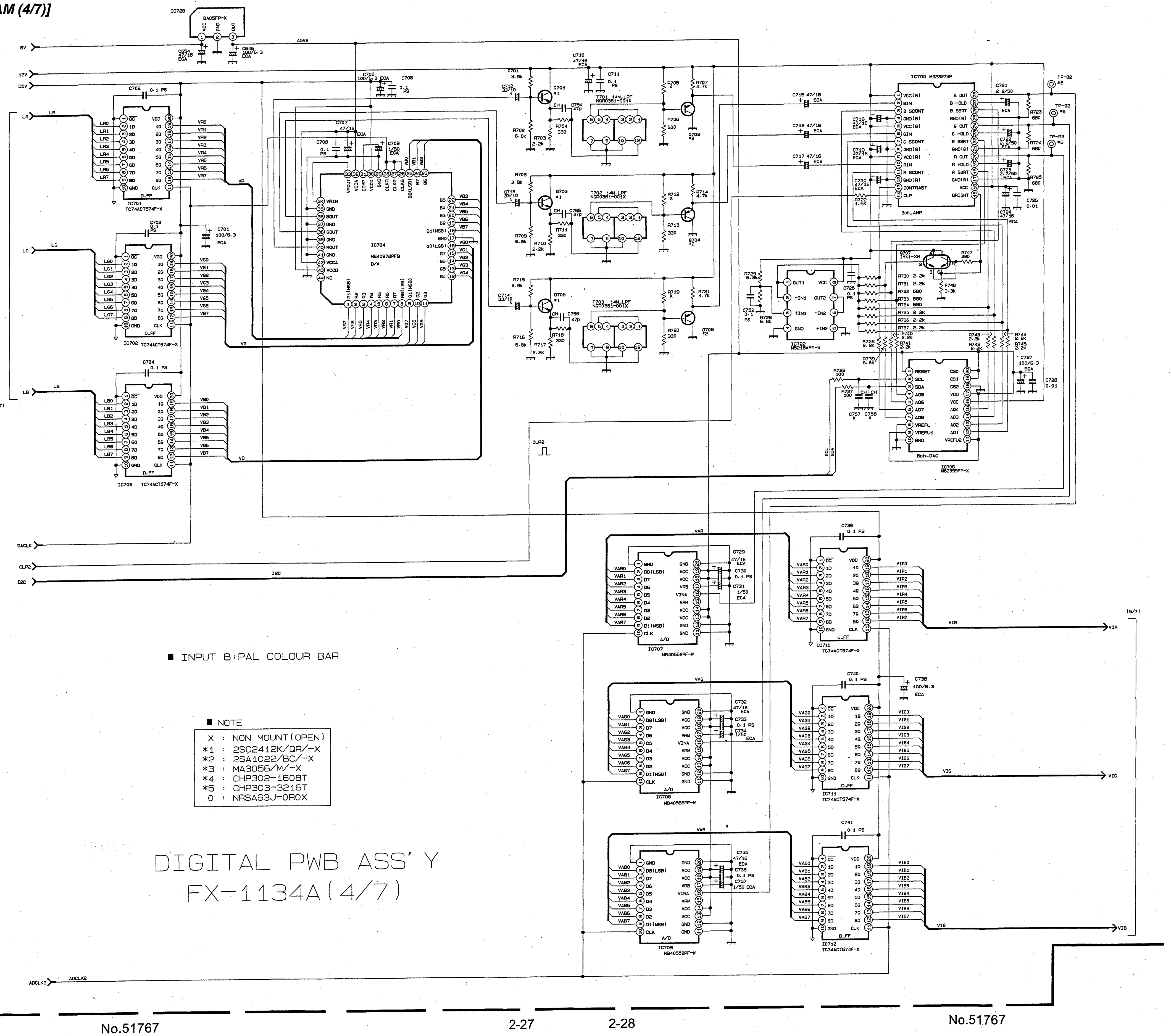
■ NOTE

X : NON MOUNT(OPEN)
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : MA3056/M/-X
*4 : CHP302-1608T
*5 : CHP303-3216T
O : NRSA63J-0R0X

DIGITAL PWB ASS'Y
FX-1134A(3/7)

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

[DIGITAL PWB CIRCUIT DIAGRAM (4/7)]


IC728 BA05FP-X
5V
12V
D5V
A5V2
LR
LG
LB
(3/7)
IC701 TC74ACT574F-X
IC702 TC74ACT574F-X
IC703 TC74ACT574F-X
IC704 MB40978PFQ D/A
VR
VG
VB
T701 14M_LPF NGR0361-001X
T702 14M_LPF NGR0361-001X
T703 14M_LPF NGR0361-001X
IC705 M52327SP 3ch_AMP
TP-B2
TP-G2
TP-R2
Q707 IMX1-XW
IC722 M5218AFP-W
IC706 M62399FP-X 8ch_DAC
CLP2
SCL
SDA
DACLK
CLP2
I2C
VAR
VAG
VAB
IC707 MB40558PF-W A/D
IC708 MB40558PF-W A/D
IC709 MB40558PF-W A/D
IC710 TC74ACT574F-X
IC711 TC74ACT574F-X
IC712 TC74ACT574F-X
VIR
VIG
VIB
(5/7)
ADCLK2

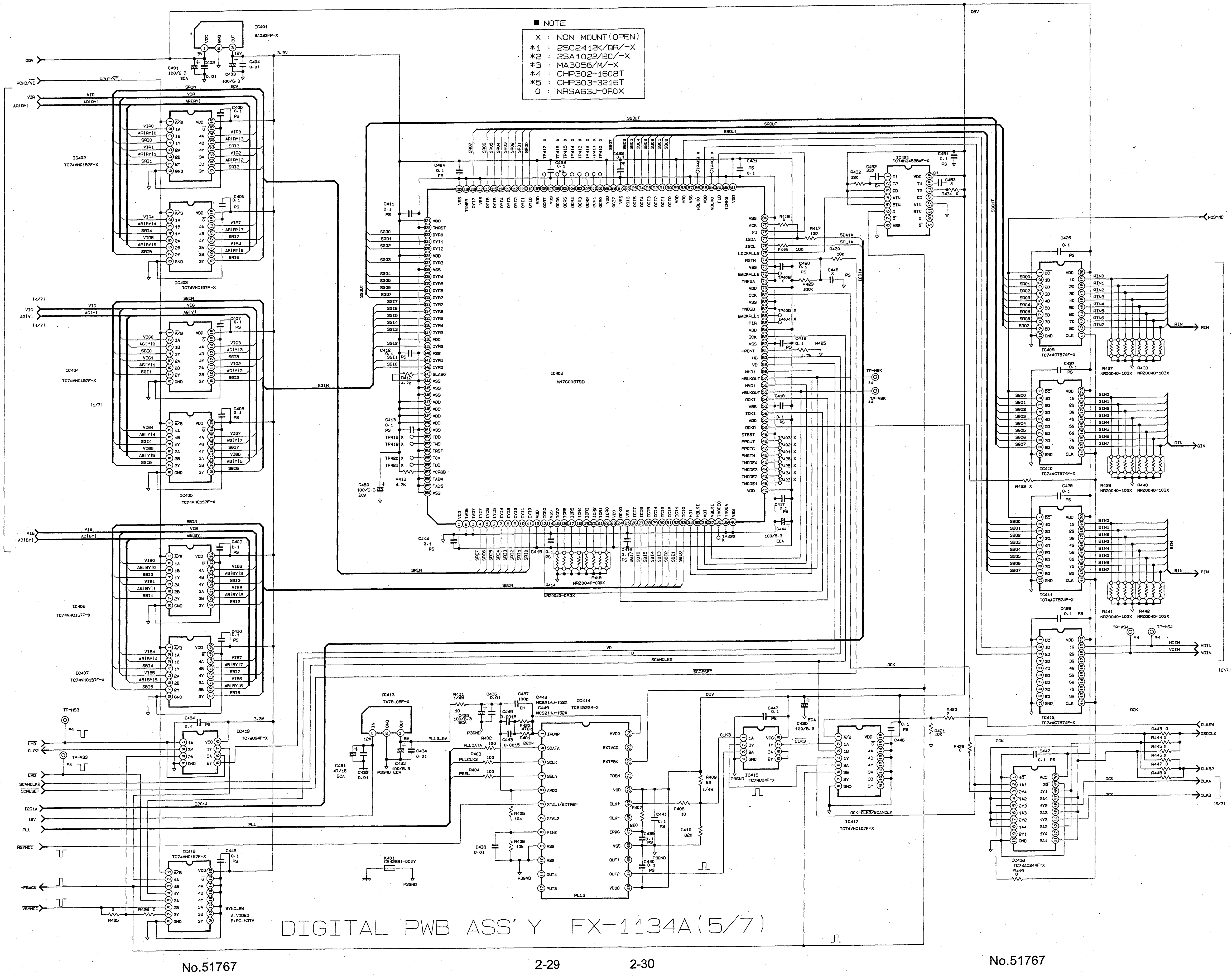
■ INPUT B:PAL COLOUR BAR

■ NOTE

X : NON MOUNT(OPEN)
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : MA3056/M/-X
*4 : CHP302-160BT
*5 : CHP303-3216T
O : NRSA63J-0R0X

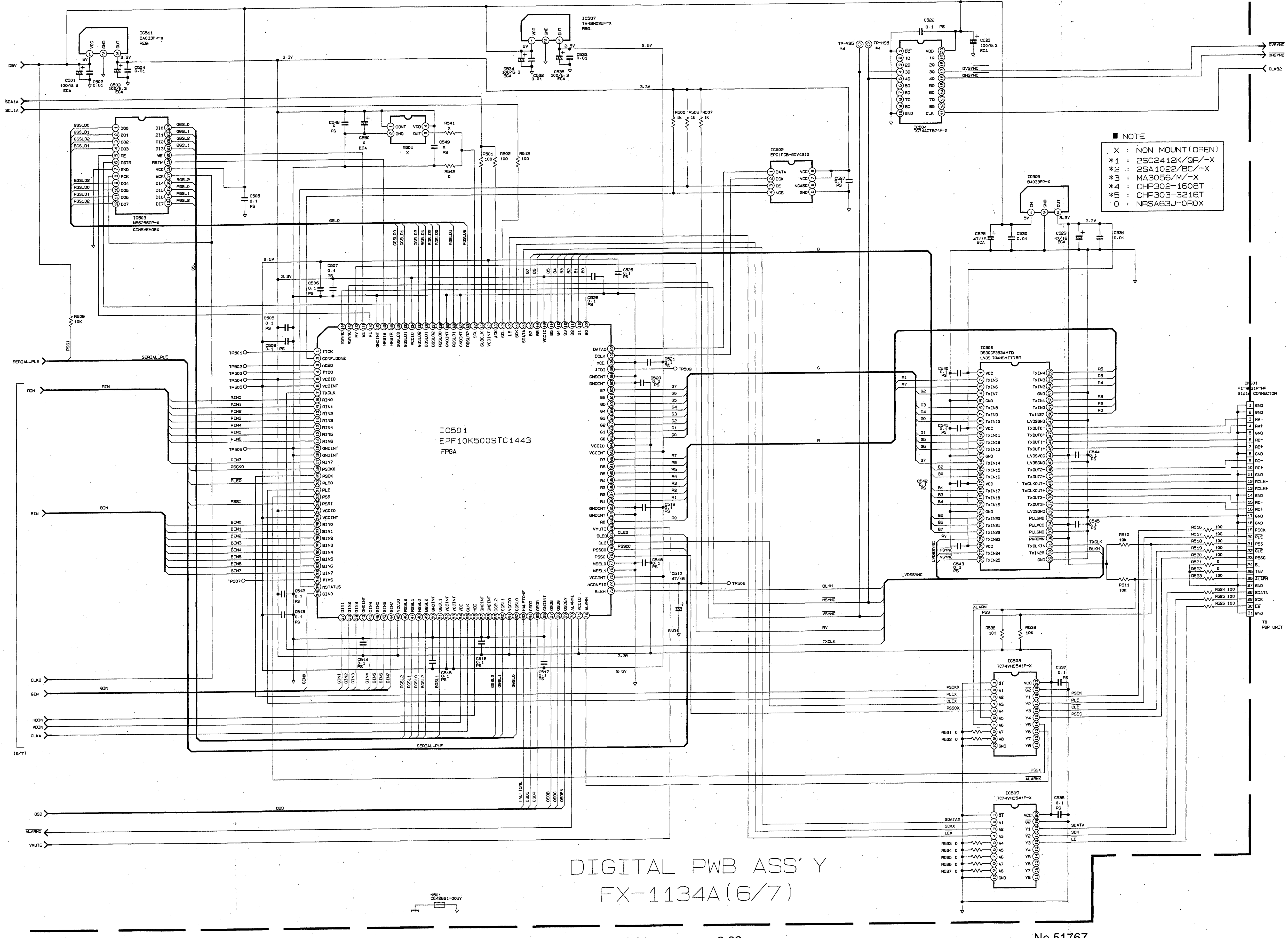
DIGITAL PWB ASS'Y
FX-1134A(4/7)

[DIGITAL PWB CIRCUIT DIAGRAM (5/7)]

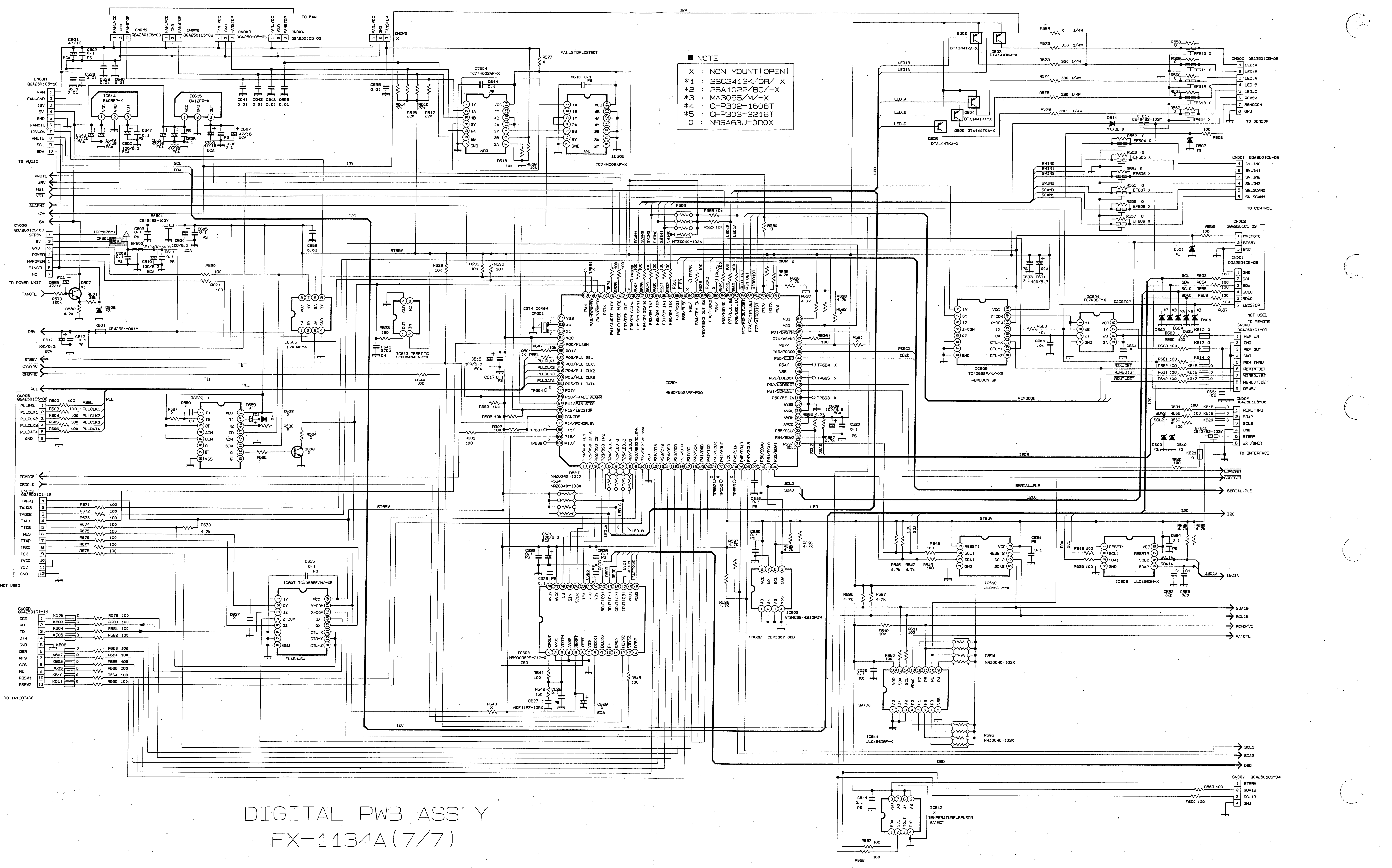

DIGITAL PWB ASS'Y FX-1134A(5/7)
IC401 BA033FP-X
IC402 TC74VHC157F-X
IC403 TC74VHC157F-X
IC404 TC74VHC157F-X
IC405 TC74VHC157F-X
IC406 TC74VHC157F-X
IC407 TC74VHC157F-X
IC408 MN7C006TSD
IC409 TC74ACT574F-X
IC410 TC74ACT574F-X
IC411 TC74ACT574F-X
IC412 TC74ACT574F-X
IC413 TA78L05F-X
IC414 ICS1522M-X
IC415 TC7WU04F-X
IC416 TC74VHC157F-X
IC417 TC74VHC157F-X
IC418 TC74AC244F-X
IC419 TC7WU04F-X
IC421 TC74HC4538AF-X
D5V
PCHD/VI
VIR
AR(RY)
VIG
AG(Y)
VIB
AB(BY)
SRIN
SGIN
SBIN
SRIN
SGIN
SBIN
SSOUT
SROUT
SBOUT
SGOUT
RIN
GIN
BIN
HDIN
VDIN
NOSYNC
CLKSM
OSDCLK
CLKB2
CLKA
CLKB
LHD
CLP2
LVD
SCANCLK2
SCRESET
I2CIA
12V
PLL
HSYNCI
HFBACK
VSYNCI
TP-HS3
TP-VS3
TP-HBK
TP-VBK
TP-VS4
TP-HS4
X401 CE42681-001Y
SYNC_SW
A:VIDEO
B:PC-HDTV
(4/7)
(1/7)
(6/7)

■ NOTE
X : NON MOUNT(OPEN)
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : MA3056/M/-X
*4 : CHP302-1608T
*5 : CHP303-3216T
0 : NRSA63J-0R0X

[DIGITAL PWB CIRCUIT DIAGRAM (6/7)]


IC501
EPF10K500STC1443
FPGA
IC502 EPC1PC8-GDV4210
IC503 M6256GP-X CINEMEMOBX
IC504 TC74ACT574F-X
IC505 BA033FP-X
IC506 DS90CF383AMTD LVDS TRANSMITTER
IC507 TA48M025F-X REG.
IC508 TC74VHC541F-X
IC509 TC74VHC541F-X
IC511 BA033FP-X REG.
CN501 FI-W31P-HF 31pin CONNECTOR
TO POP UNIT
D5V
SDA1A
SCL1A
SERIAL_PLE
RIN
BIN
GIN
CLKB
HDIN
VDIN
CLKA
OSD
ALARMI
VMUTE
DVSYNC
DHSYNC
CLKB2
X501 CE4268I-001Y
(5/7)
■ NOTE
X : NON MOUNT(OPEN)
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : MA3056/M/-X
*4 : CHP302-1608T
*5 : CHP303-3216T
0 : NRSA63J-0R0X
DIGITAL PWB ASS' Y
FX-1134A(6/7)

[DIGITAL PWB CIRCUIT DIAGRAM (7/7)]

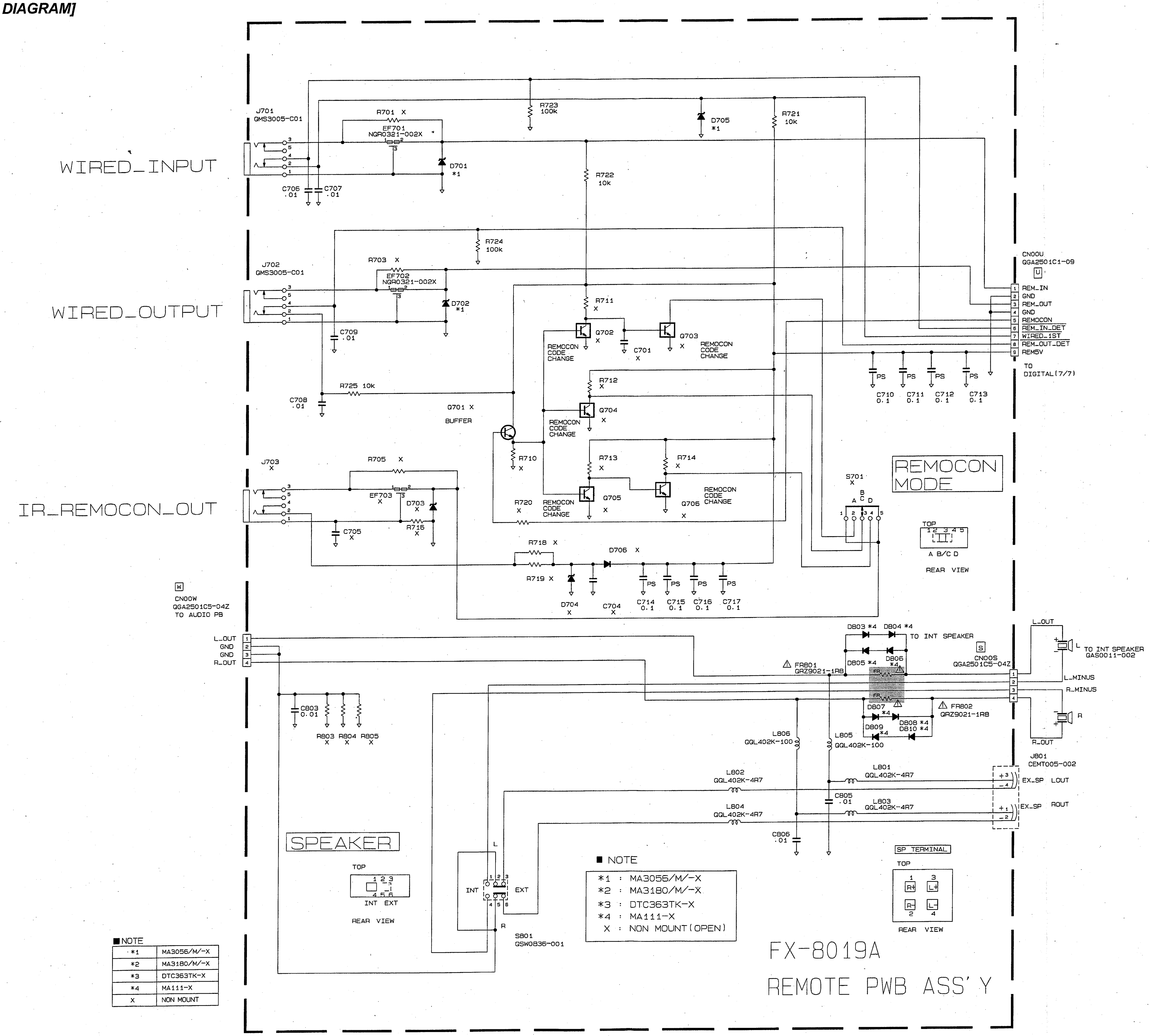

TO FAN
CN0W1
CN0W2
CN0W3
CN0W4
CN0W5
CN00H
TO AUDIO
CN009
TO POWER UNIT
CN00Y
CN0C3
NOT USED
CN00R
TO INTERFACE
IC614 BA05FP-X
IC615 BA12FP-X
IC604 TC74HC02AF-X
IC605 TC74HC08AF-X
IC606 TC7W04F-X
IC613 RESET IC
IC622
IC601 MB90F553APF-P00
IC607 TC4053BF/N/-XE
FLASH.SW
IC603 MB90096PF-212-X
OSD
IC602 AT24C32-4210PZW
SK602 CEMS007-008
IC609 TC4053BF/N/-XE
REMOCON.SW
IC621 TC7W08F-X
IC610 JLC1563M-X
IC608 JLC1563M-X
IC611 JLC1562BF-X
IC612 TEMPERATURE.SENSOR
TO SENSOR
TO CONTROL
TO REMOTE
TO INTERFACE
CN00X
CN00T
CN0C2
CN0C1
CN00U
CN00V
CN00V
12V
STB5V
I2C
PLL
LED
OSD
SERIAL_PLE
I2C0
I2C2
REMOCON
FAN_STOP_DETECT

■ NOTE
X : NON MOUNT(OPEN)
*1 : 2SC2412K/QR/-X
*2 : 2SA1022/BC/-X
*3 : MA3056/M/-X
*4 : CHP302-1608T
*5 : CHP303-3216T
0 : NRSA63J-0R0X

DIGITAL PWB ASS'Y
FX-1134A(7/7)

GD-V4210PZW
GD-V4210PZW-G
GD-V4210PCE
GD-V4210PCE-G

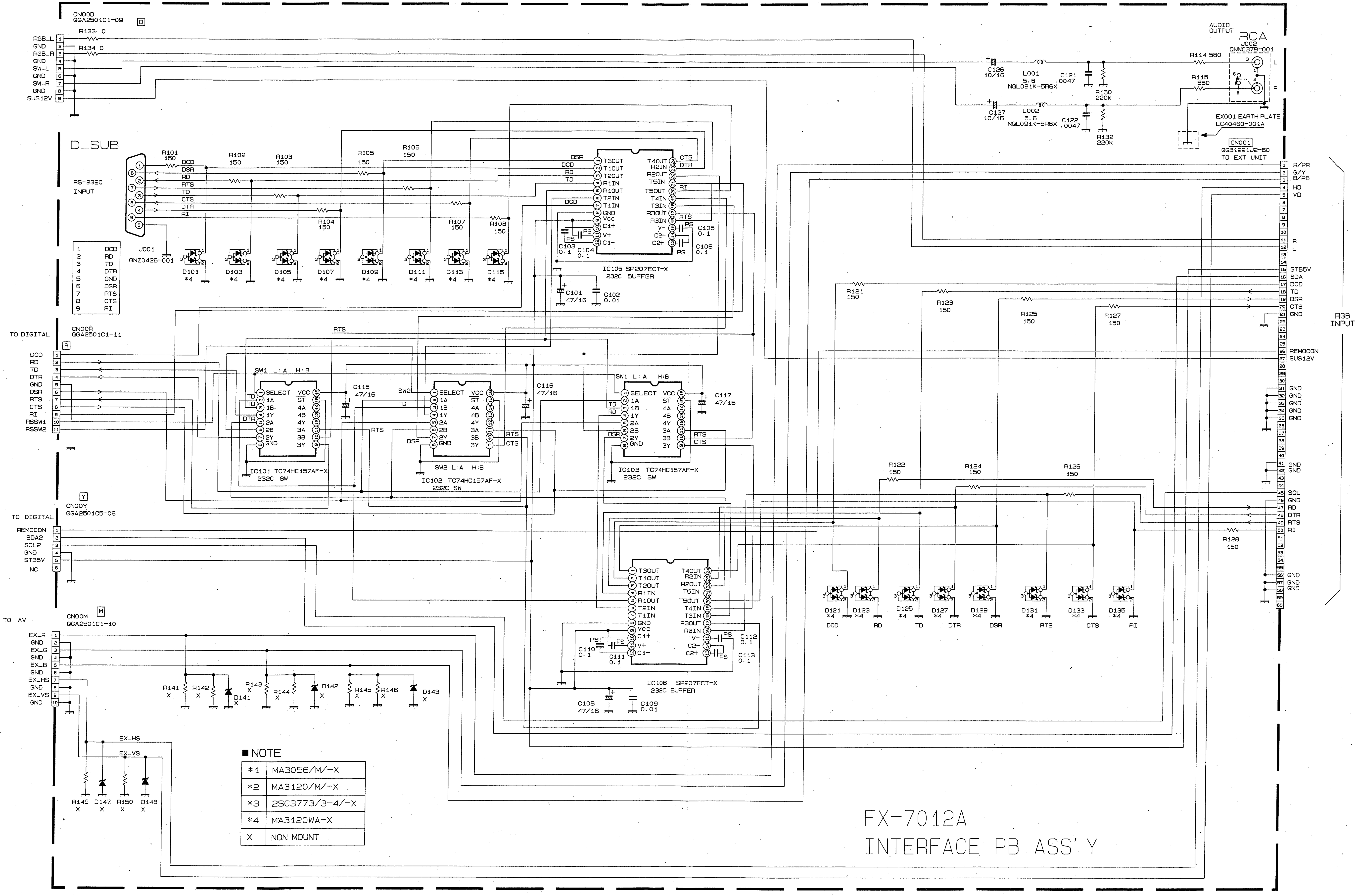
[REMOTE PWB CIRCUIT DIAGRAM]


WIRED_INPUT
J701
QMS3005-C01
R701 X
EF701
NQR0321-002X
D701
*1
C706
.01
C707
.01
R723
100k
D705
*1
R721
10k
R722
10k
WIRED_OUTPUT
J702
QMS3005-C01
R703 X
EF702
NQR0321-002X
D702
*1
C709
.01
R724
100k
R711
X
Q702
X
C701
X
Q703
X
REMOCON CODE CHANGE
C708
.01
R725 10k
Q701 X
BUFFER
R712
X
Q704
X
R710
X
R713
X
R714
X
Q705
X
Q706
X
R720
X
IR_REMOCON_OUT
J703
X
R705 X
EF703
X
D703
X
R715
X
C705
X
R718 X
R719 X
D706 X
D704
X
C704
X
C714
0.1
C715
0.1
C716
0.1
C717
0.1
PS
CN00U
QGA2501C1-09
U
1 REM_IN
2 GND
3 REM_OUT
4 GND
5 REMOCON
6 REM_IN_DET
7 WIRED_1ST
8 REM_OUT_DET
9 REM5V
TO DIGITAL(7/7)
C710
0.1
C711
0.1
C712
0.1
C713
0.1
REMOCON MODE
S701
X
A B/C D
TOP
REAR VIEW
W
CN00W
QGA2501C5-04Z
TO AUDIO PB
1 L_OUT
2 GND
3 GND
4 R_OUT
D803 *4
D804 *4
TO INT SPEAKER
S
CN00S
QGA2501C5-04Z
FR801
QRZ9021-1R8
D805 *4
D806 *4
FR802
QRZ9021-1R8
D807 *4
D808 *4
D809 *4
D810 *4
L_OUT
TO INT SPEAKER
QAS0011-002
L_MINUS
R_MINUS
R_OUT
L
R
C803
0.01
R803 X
R804 X
R805 X
L806
QQL402K-100
L805
QQL402K-100
L802
QQL402K-4R7
L801
QQL402K-4R7
C805
.01
L804
QQL402K-4R7
L803
QQL402K-4R7
C806
.01
J801
CEMT005-002
EX_SP LOUT
EX_SP ROUT
SPEAKER
TOP
INT EXT
REAR VIEW
INT
EXT
S801
QSW0836-001
■ NOTE
*1 : MA3056/M/-X
*2 : MA3180/M/-X
*3 : DTC363TK-X
*4 : MA111-X
X : NON MOUNT(OPEN)
SP TERMINAL
TOP
R+
L+
R-
L-
REAR VIEW
FX-8019A
REMOTE PWB ASS'Y

■NOTE

*1	MA3056/M/-X
*2	MA3180/M/-X
*3	DTC363TK-X
*4	MA111-X
X	NON MOUNT

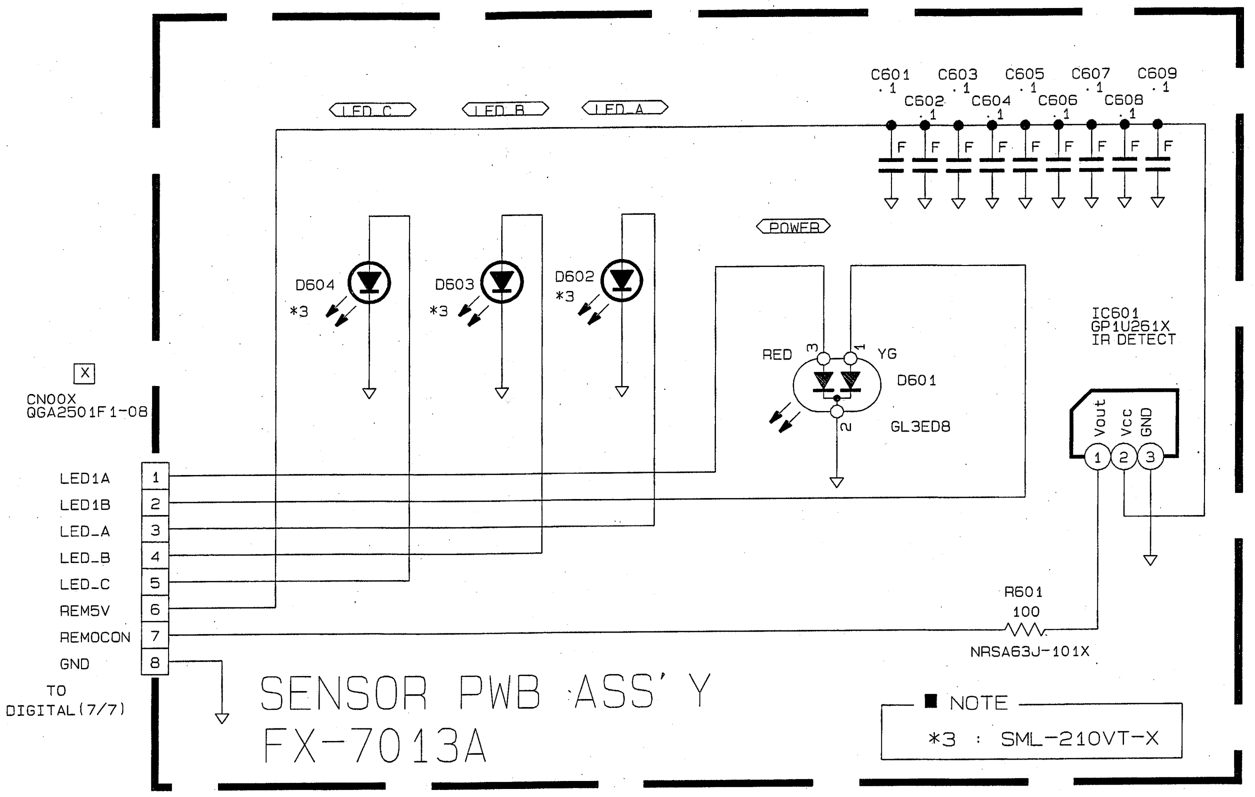
[INTERFACE PWB CIRCUIT DIAGRAM]


CN00D GGA2501C1-09
D
RGB_L
GND
RGB_R
GND
SW_L
GND
SW_R
GND
SUS12V
R133 0
R134 0
D_SUB
RS-232C INPUT
J001 QNZ0426-001
DCD
DSR
RD
RTS
TD
CTS
DTR
RI
R101 150
R102 150
R103 150
R104 150
R105 150
R106 150
R107 150
R108 150
D101 *4
D103 *4
D105 *4
D107 *4
D109 *4
D111 *4
D113 *4
D115 *4
IC105 SP207ECT-X 232C BUFFER
C101 47/16
C102 0.01
C103 0.1
C104 0.1
C105 0.1
C106 0.1
AUDIO OUTPUT
RCA
J002 QNN0379-001
C126 10/16
C127 10/16
L001 5.6 NQL091K-5R6X
L002 5.6 NQL091K-5R6X
C121 .0047
C122 .0047
R130 220k
R132 220k
R114 560
R115 560
EX001 EARTH PLATE LC40460-001A
CN001 QGB1221J2-60 TO EXT UNIT
R/PR
G/Y
B/PB
HD
VD
R
L
STB5V
SDA
DCD
TD
DSR
CTS
GND
REMOCON
SUS12V
SCL
RD
DTR
RTS
RI
RGB INPUT
R121 150
R123 150
R125 150
R127 150
R122 150
R124 150
R126 150
R128 150
TO DIGITAL
CN00R GGA2501C1-11
R
RSSW1
RSSW2
SW1 L:A H:B
SW2 L:A H:B
IC101 TC74HC157AF-X 232C SW
IC102 TC74HC157AF-X 232C SW
IC103 TC74HC157AF-X 232C SW
C115 47/16
C116 47/16
C117 47/16
CN00Y GGA2501C5-06
Y
REMOCON
SDA2
SCL2
STB5V
NC
IC106 SP207ECT-X 232C BUFFER
C108 47/16
C109 0.01
C110 0.1
C111 0.1
C112 0.1
C113 0.1
D121 *4
D123 *4
D125 *4
D127 *4
D129 *4
D131 *4
D133 *4
D135 *4
TO AV
CN00M GGA2501C1-10
M
EX_R
EX_G
EX_B
EX_HS
EX_VS
R141 X
R142 X
R143 X
R144 X
R145 X
R146 X
D141 X
D142 X
D143 X
R149 X
D147 X
R150 X
D148 X
FX-7012A
INTERFACE PB ASS'Y

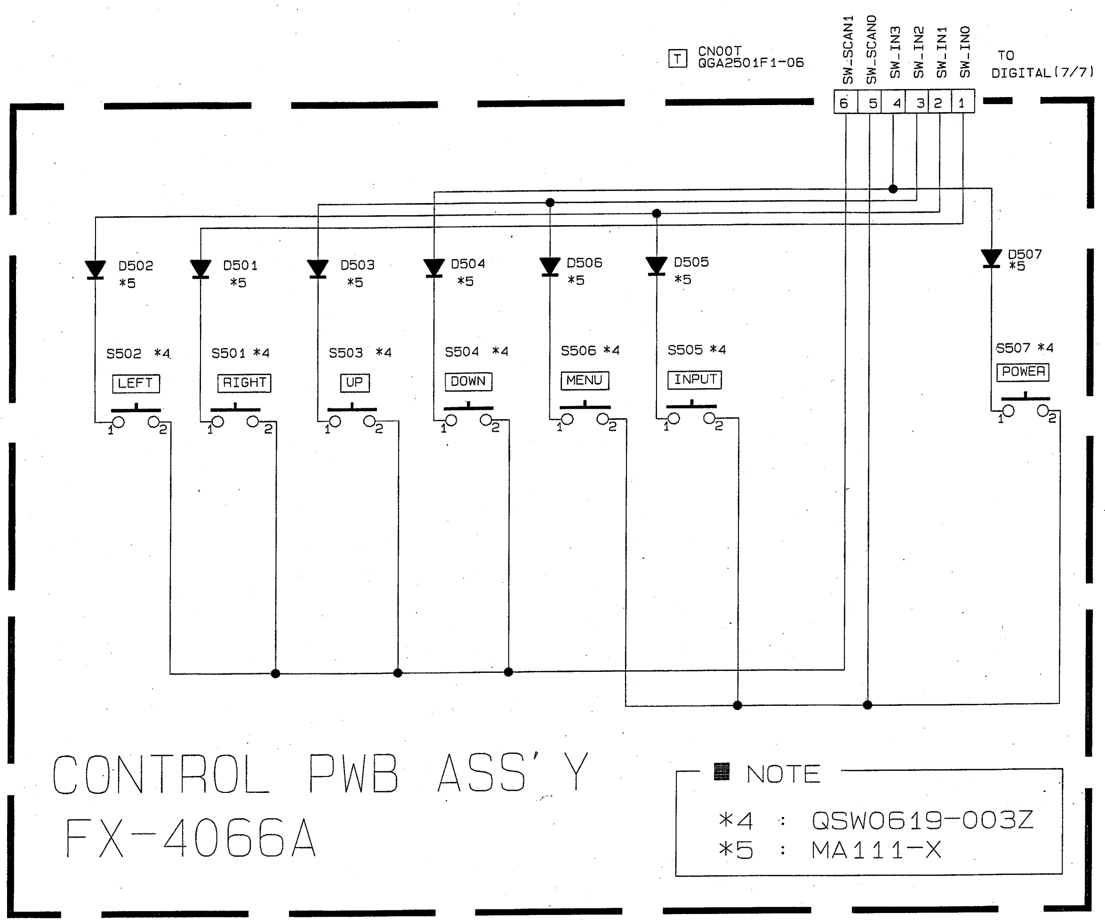
■ NOTE

*1	MA3056/M/-X
*2	MA3120/M/-X
*3	2SC3773/3-4/-X
*4	MA3120WA-X
X	NON MOUNT

[SENSOR PWB CIRCUIT DIAGRAM]

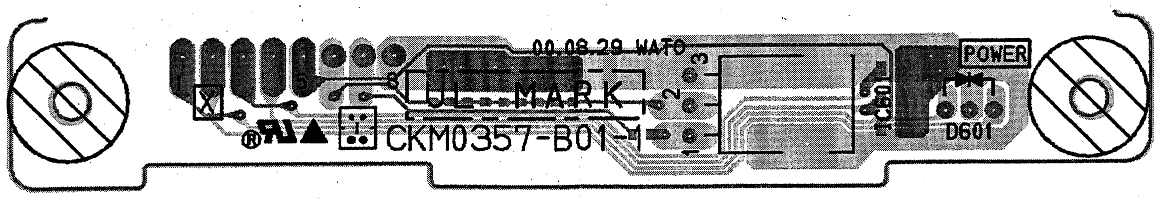

C601 .1
C603 .1
C605 .1
C607 .1
C609 .1
C602 .1
C604 .1
C606 .1
C608 .1
F
LED_C
LED_B
LED_A
POWER
D604 *3
D603 *3
D602 *3
RED
YG
D601
GL3ED8
IC601
GP1U261X
IR DETECT
Vout
Vcc
GND
1
2
3
X
CN00X
QGA2501F1-08
LED1A 1
LED1B 2
LED_A 3
LED_B 4
LED_C 5
REM5V 6
REMOCON 7
GND 8
TO DIGITAL(7/7)
R601
100
NRSA63J-101X
SENSOR PWB ASS'Y
FX-7013A
■ NOTE
*3 : SML-210VT-X

[CONTROL PWB CIRCUIT DIAGRAM]

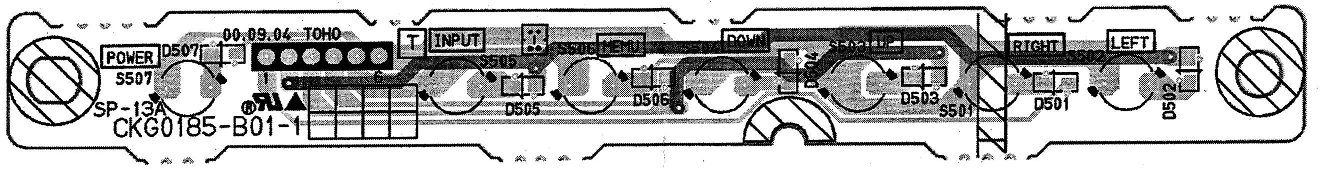

T
CN00T
QGA2501F1-06
SW_SCAN1
SW_SCAN0
SW_IN3
SW_IN2
SW_IN1
SW_IN0
6 5 4 3 2 1
TO
DIGITAL(7/7)
D502 *5
D501 *5
D503 *5
D504 *5
D506 *5
D505 *5
D507 *5
S502 *4
LEFT
S501 *4
RIGHT
S503 *4
UP
S504 *4
DOWN
S506 *4
MENU
S505 *4
INPUT
S507 *4
POWER
1 2
CONTROL PWB ASS'Y
FX-4066A
■ NOTE
*4 : QSW0619-003Z
*5 : MA111-X

PATTERN DIAGRAMS

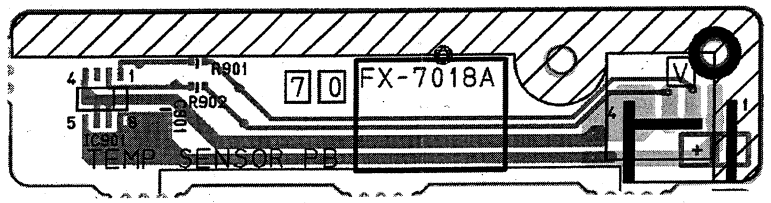
[SENSOR PWB PATTERN]


00.08.29 WATO
POWER
UL MARK
CKM0357-B01-1
D601
X
1
2
3

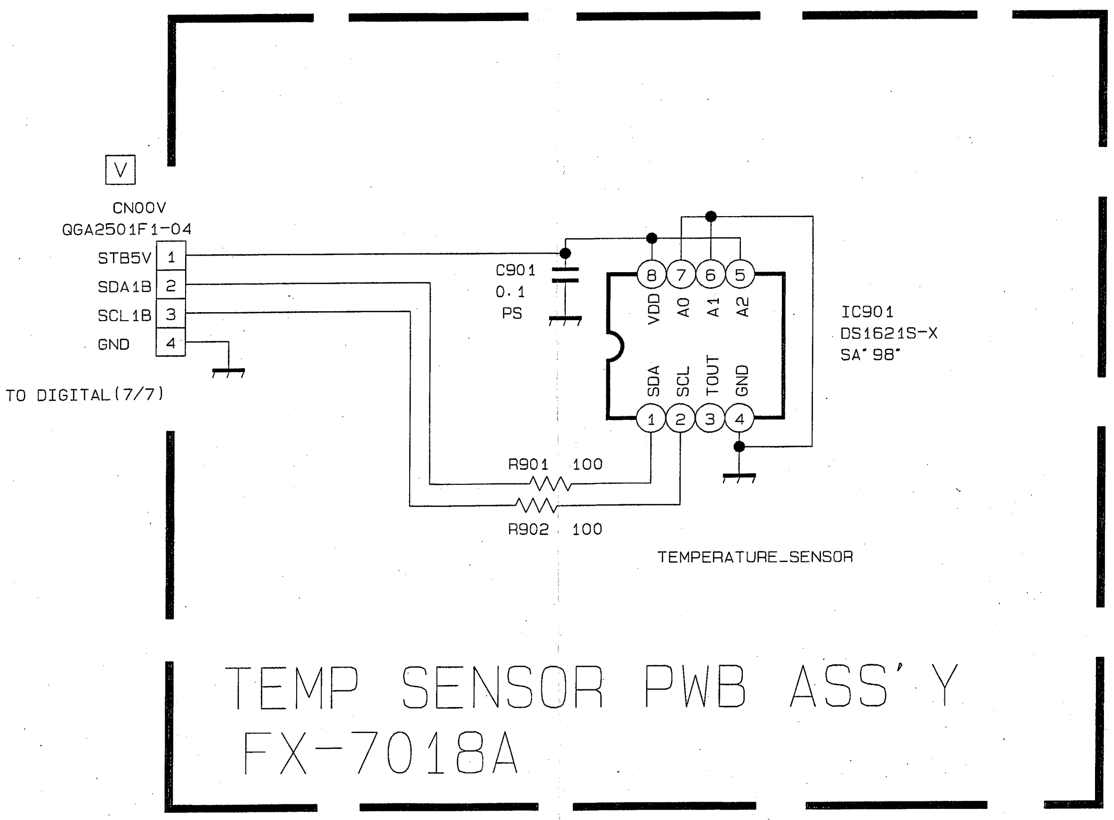
[CONTROL PWB PATTERN]


POWER
S507
D507
00.09.04 TOHO
T
INPUT
S505
D505
MENU
S506
D506
DOWN
D504
S504
UP
S503
D503
S501
RIGHT
LEFT
S502
D501
D502
SP-13A
CKG0185-B01-1

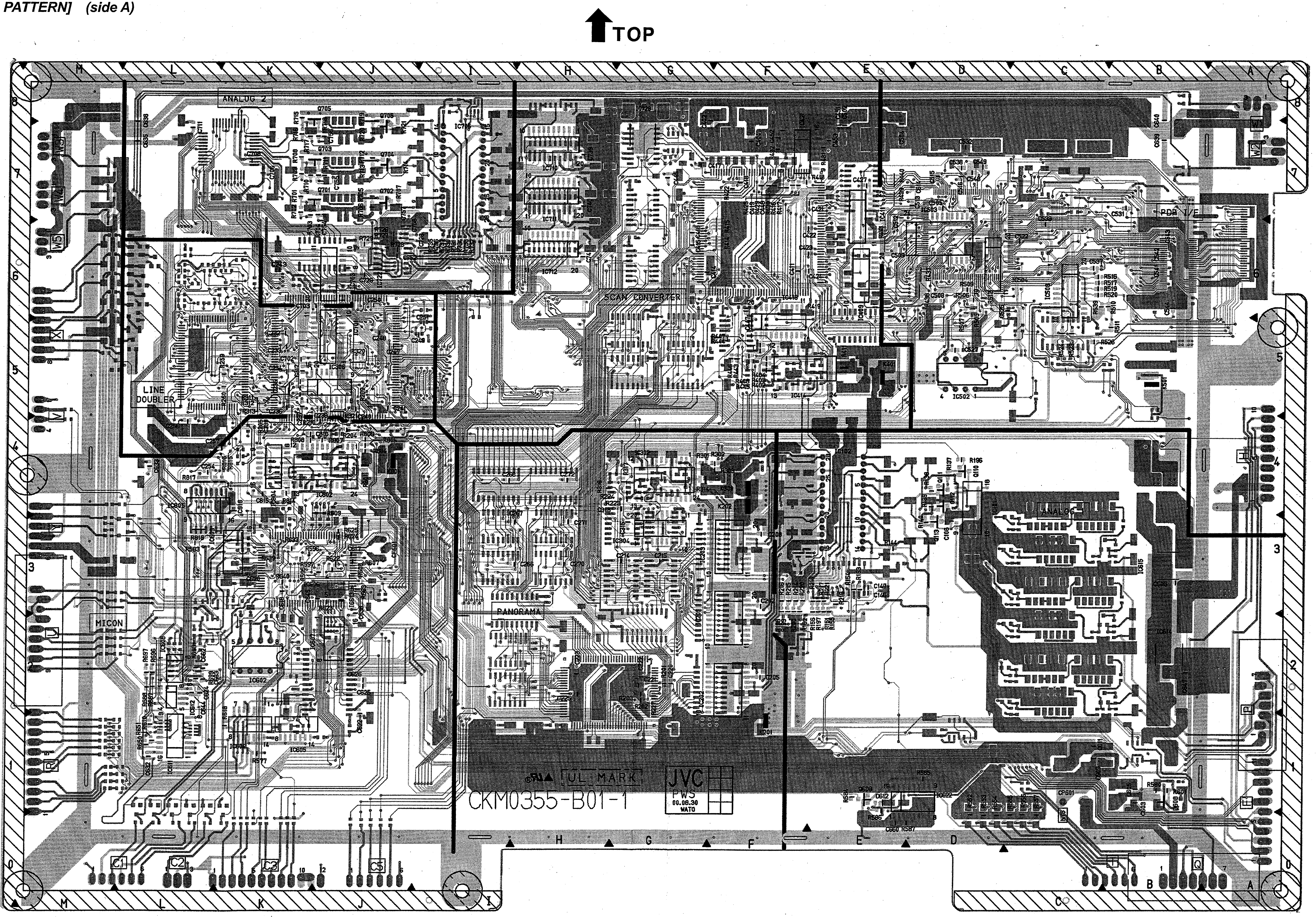
[TEMP SENSOR PWB PATTERN]


R901
R902
C901
70
FX-7018A
V
TEMP SENSOR PB
4
5
1

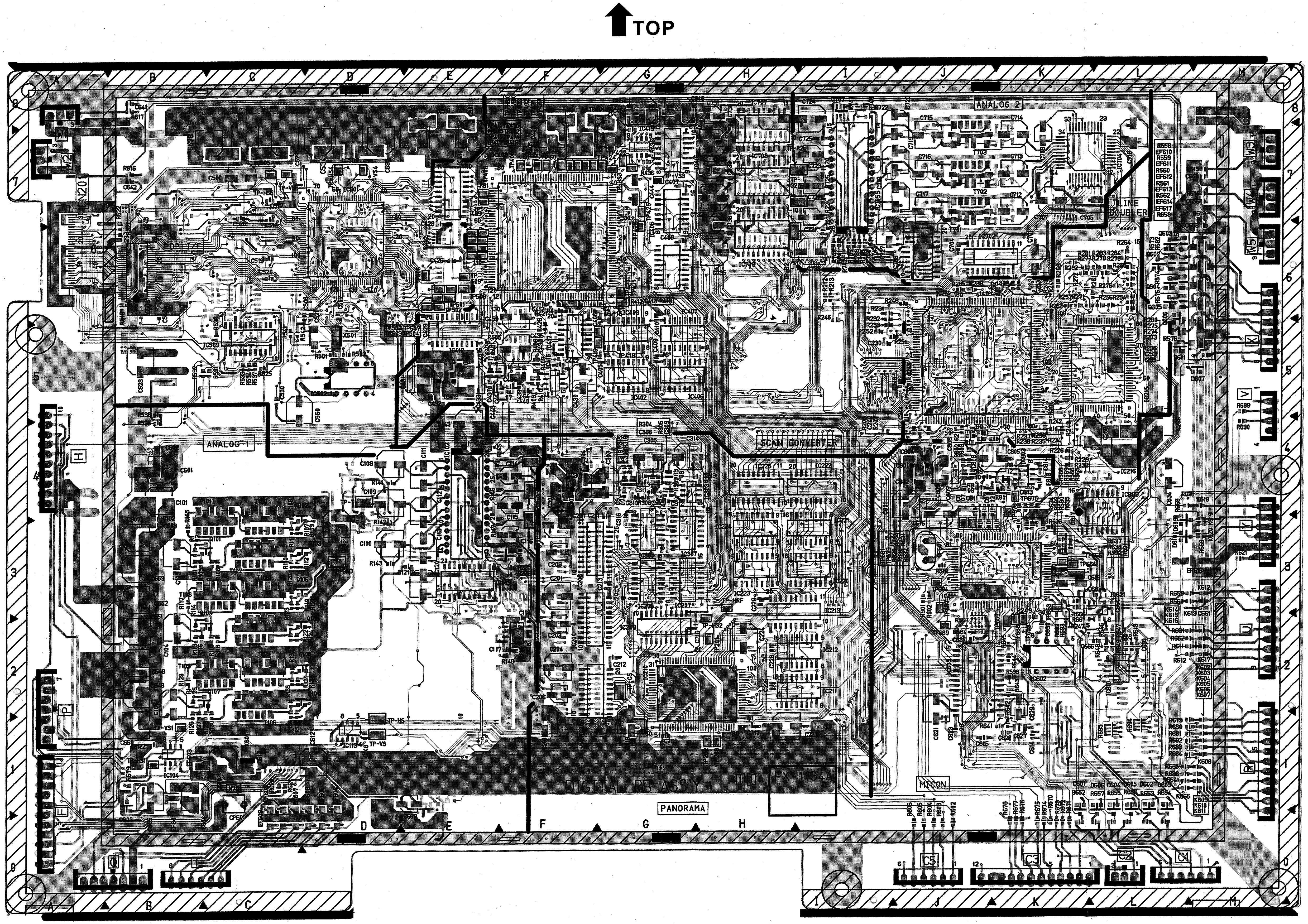
[TEMP SENSOR PWB CIRCUIT DIAGRAM]


V
CN00V
QGA2501F1-04
STB5V 1
SDA1B 2
SCL1B 3
GND 4
TO DIGITAL(7/7)
C901
0.1
PS
8 7 6 5
VDD
A0
A1
A2
SDA
SCL
TOUT
GND
1 2 3 4
IC901
DS1621S-X
SA'98'
R901 100
R902 100
TEMPERATURE_SENSOR
TEMP SENSOR PWB ASS'Y
FX-7018A

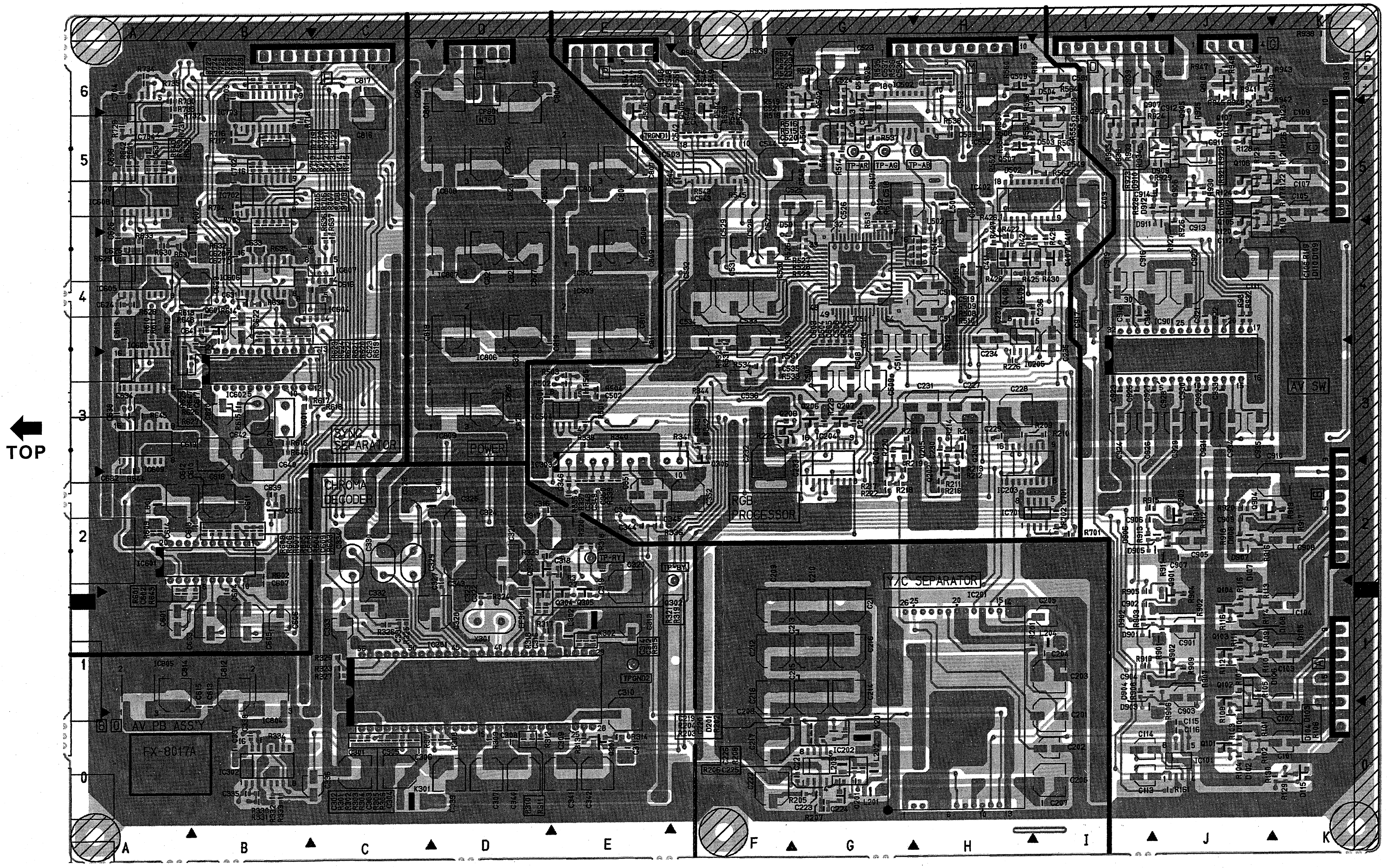
[DIGITAL PWB PATTERN] (side A)


TOP
ANALOG 2
LINE DOUBLER
SCAN CONVERTER
PANORAMA
MICON
ANALOG
PDP I/F
UL MARK
JVC
CKM0355-B01-1
A
B
C
D
E
F
G
H
I
J
K
L
M
0
1
2
3
4
5
6
7
8
C1
C2
C3
C5
W5
W6
W7
IC502
IC602
IC605
CP501

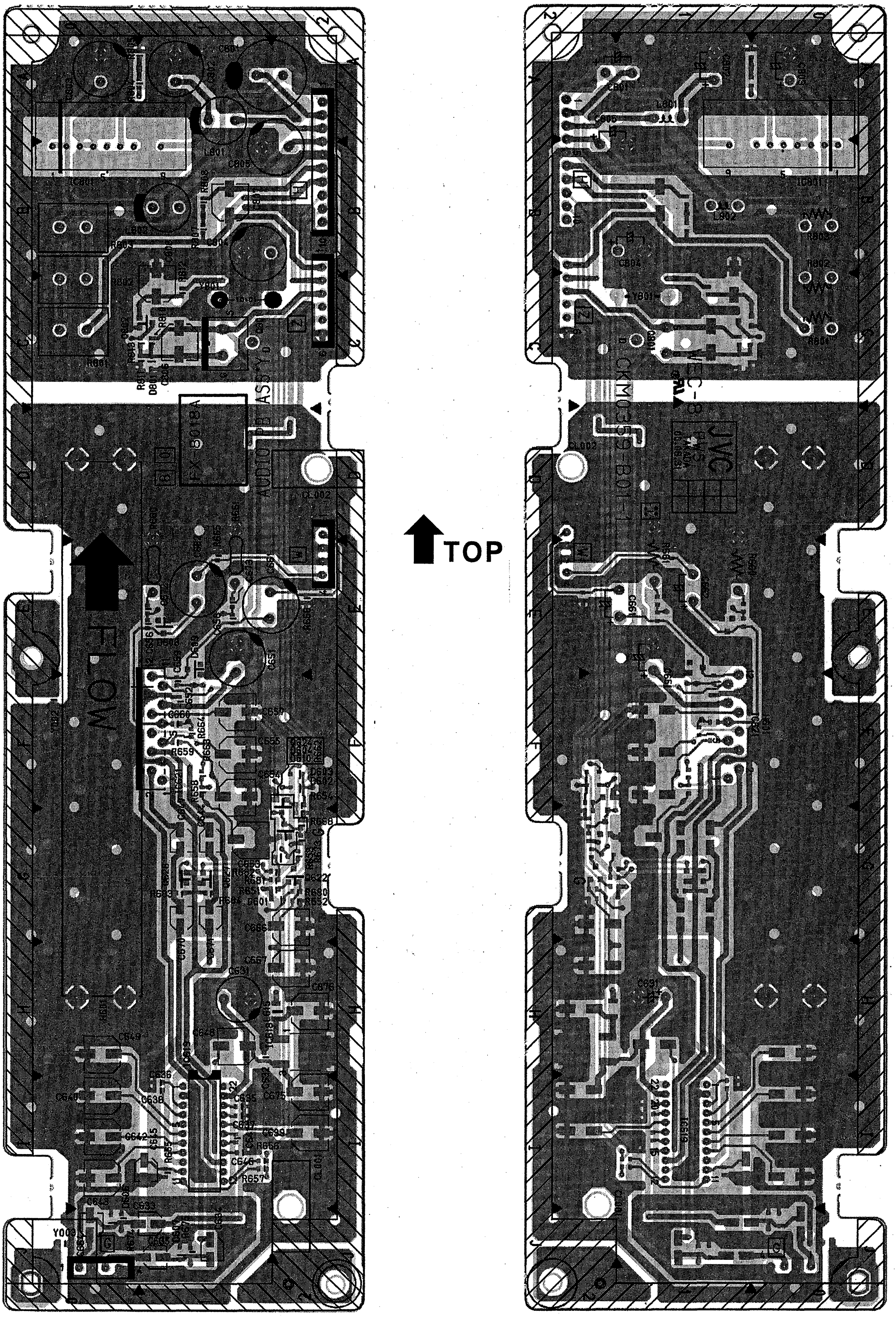
[DIGITAL PWB PATTERN] (side B)


TOP
ANALOG 1
ANALOG 2
SCAN CONVERTER
LINE DOUBLER
DIGITAL PB ASS'Y
FX-1134A
MICON
PANORAMA

[AV PWB PATTERN]


TOP
A
B
C
D
E
F
G
H
I
J
K
0
1
2
3
4
5
6
SYNC SEPARATOR
POWER
CHROMA DECODER
RGB PROCESSOR
Y/C SEPARATOR
AV SW
AV PB ASSY
FX-8017A
IC801
IC602
IC201
IC202
IC901
IC301
TP-AR
TP-AG
TP-AB
TP-RY
TP-BY
TPGND1
TPGND2

[AUDIO PWB PATTERN]

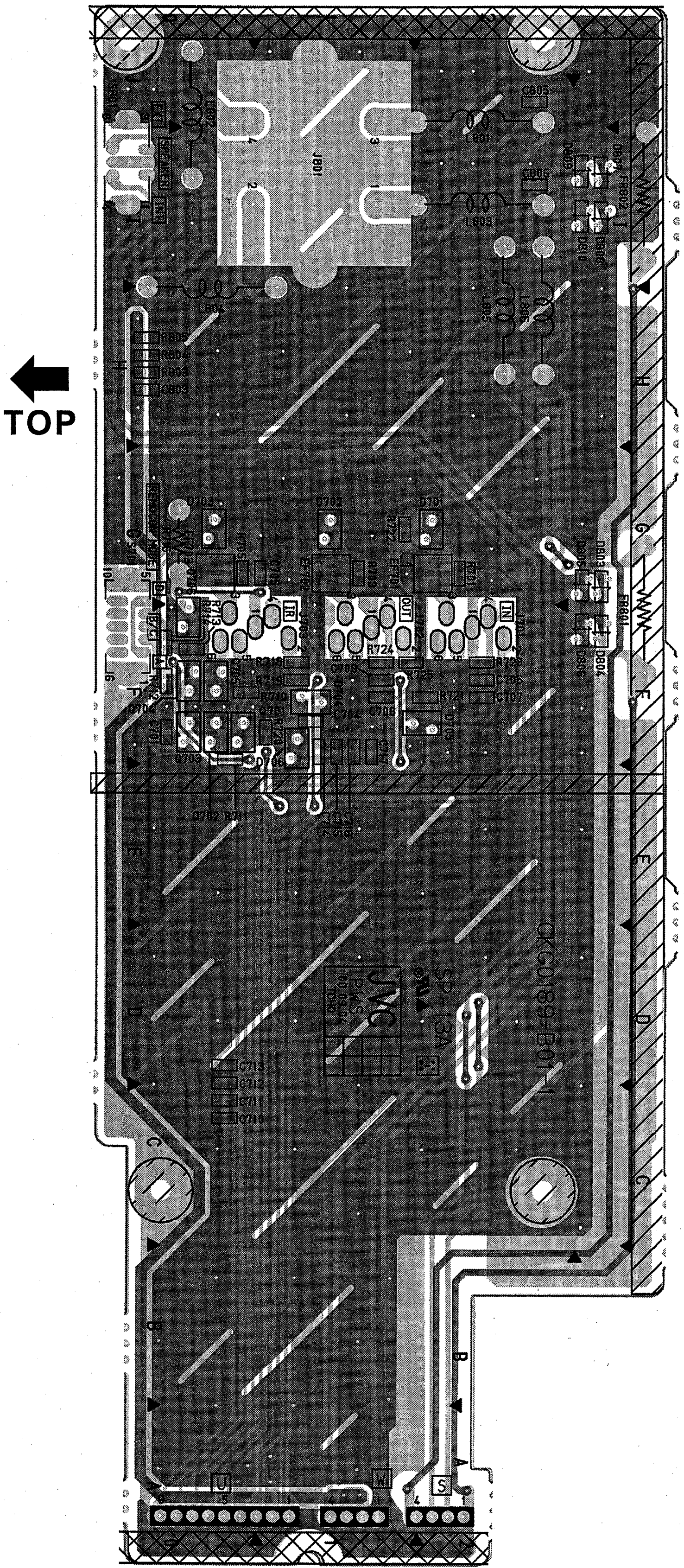


(side A)

(side B)

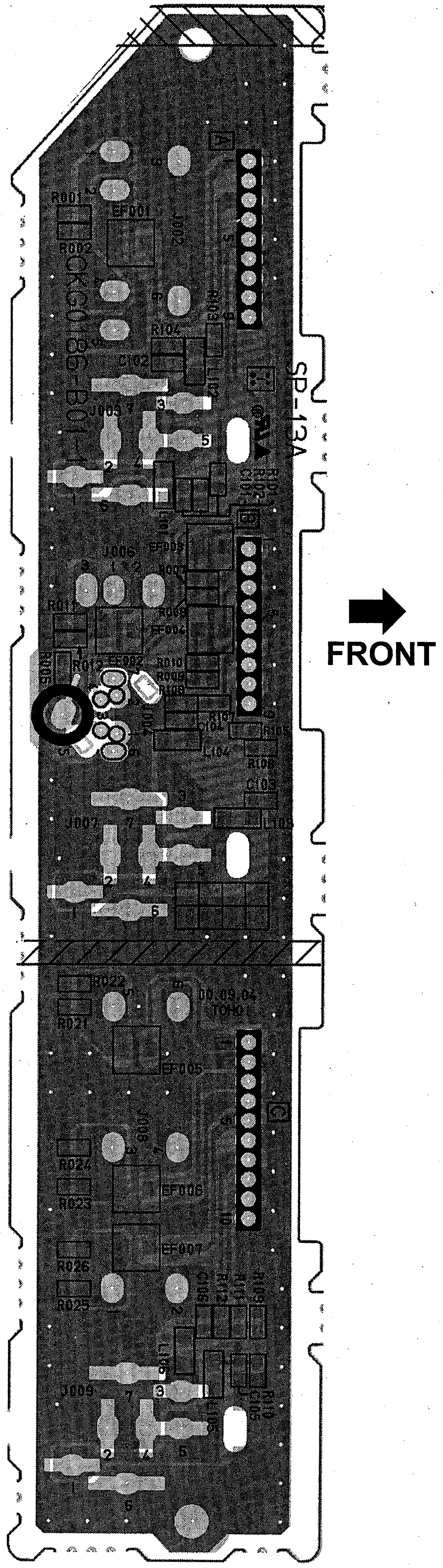
TOP
FLOW
AUDIO PWB ASSY
JVC

[REMOTE PWB PATTERN]

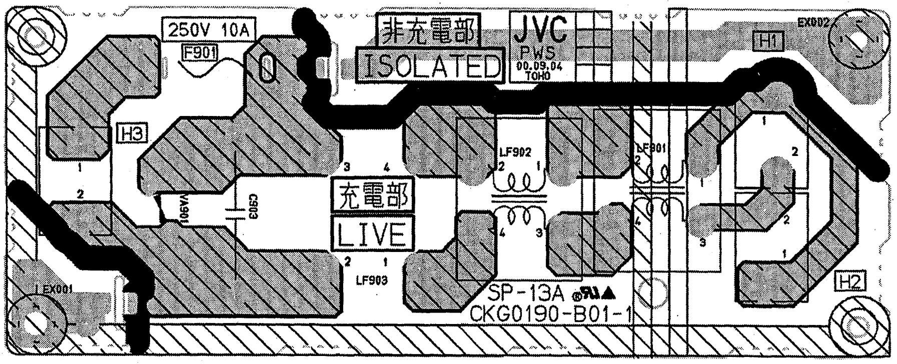

TOP
J801
JVC
SP-13A
QKG0189-B01-1

[TERMINAL PWB CIRCUIT DIAGRAM]

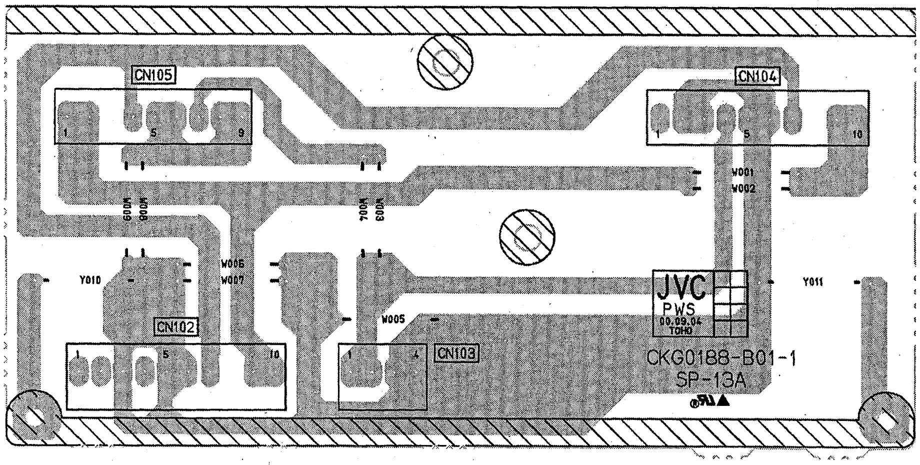
GD-V4210PZW&GD-V4210PZW-G


FRONT
SP-13A
QKG0188-B01
J002
J003
J006
J007
J008
J009
EF001
EF005
EF006
EF007
00.09.04
TOHO

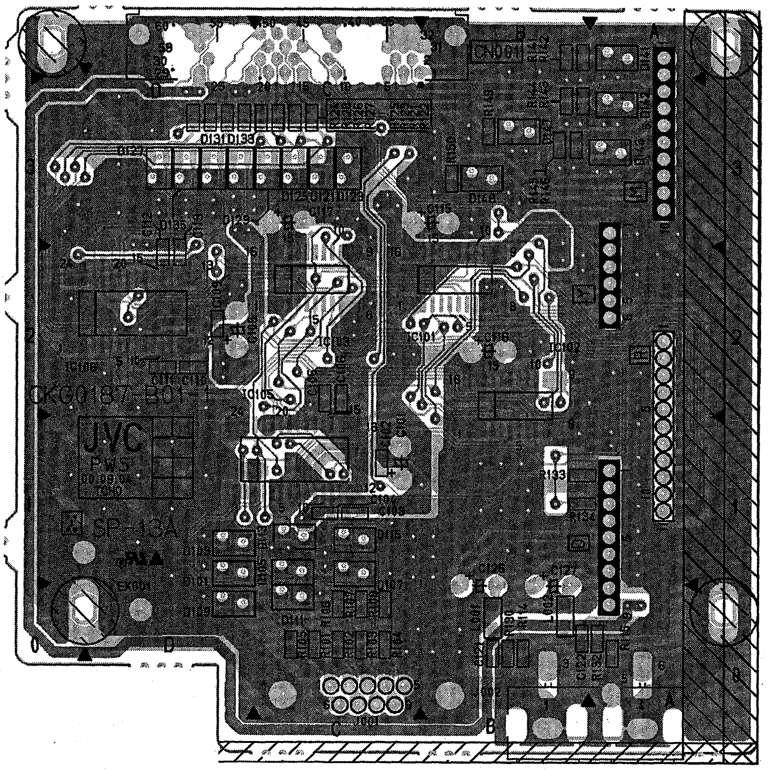
[FILTER PWB PATTERN]


250V 10A
F901
非充電部
ISOLATED
JVC
PWS
00.09.04
TOHO
EX002
H1
H3
H2
VA901
C903
充電部
LIVE
LF903
LF902
LF901
EX001
SP-13A
CKG0190-B01-1

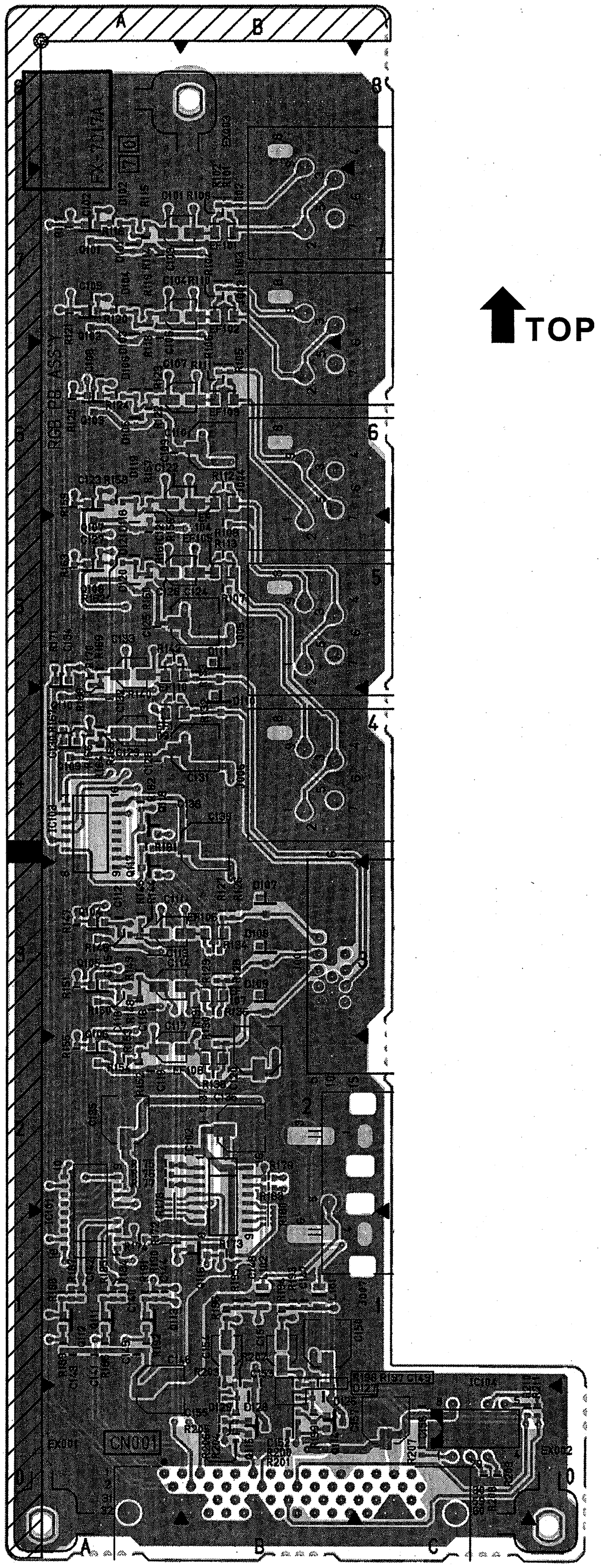
[DIVIDER PWB PATTERN]


CN105
CN104
W001
W002
W009
W008
W004
W003
W006
W007
W005
Y010
Y011
CN102
CN103
JVC
PWS
00.09.04
TOHO
CKG0188-B01-1
SP-13A

[INTERFACE PWB PATTERN]


CN001
IC101
IC102
IC103
IC105
IC106
CKG0187-B01-1
JVC
PWS
00.09.04
TOHO
SP-13A
EX001
R133
R134
C126
C127

[RGB INPUT PWB PATTERN]


TOP
A
B
C
CN001
IC101
IC102
EX001
EX002
RGB PB ASSY

0010
VP
MS/AO

PARTS LIST

CAUTION

- The parts identified by the ⚠ symbol are important for the safety . Whenever replacing these parts, be sure to use specified ones to secure the safety .
- The parts not indicated in this Parts List and those which are filled with lines --- in the Parts No. columns will not be supplied .
- P. W. Board Ass'y will not be supplied, but those which are filled with the Parts No. in the Parts No. columns will be supplied .

ABBREVIATIONS OF RESISTORS, CAPACITORS AND TOLERANCES

RESISTORS		CAPACITORS	
C R	Carbon Resistor	C CAP.	Ceramic Capacitor
F R	Fusible Resistor	E CAP.	Electrolytic Capacitor
P R	Plate Resistor	M CAP.	Mylar Capacitor
V R	Variable Resistor	HV CAP.	High Voltage Capacitor
HV R	High Voltage Resistor	MF CAP.	Metalized Film Capacitor
MF R	Metal Film Resistor	MM CAP.	Metalized Mylar Capacitor
MG R	Metal Glazed Resistor	MP CAP.	Metalized Polystyrol Capacitor
MP R	Metal Plate Resistor	PP CAP.	Polypropylene Capacitor
OM R	Metal Oxide Film Resistor	PS CAP.	Polystyrol Capacitor
CMF R	Coating Metal Film Resistor	TF CAP.	Thin Film Capacitor
UNF R	Non-Flammable Resistor	MPP CAP.	Metalized Polypropylene Capacitor
CH V R	Chip Variable Resistor	TAN. CAP.	Tantalum Capacitor
CH MG R	Chip Metal Glazed Resistor	CH C CAP.	Chip Ceramic Capacitor
COMP. R	Composition Resistor	BP E CAP.	Bi-Polar Electrolytic Capacitor
LPTC R	Linear Positive Temperature Coefficient Resistor	CH AL E CAP.	Chip Aluminum Electrolytic Capacitor
		CH AL BP CAP.	Chip Aluminum Bi-Polar Capacitor
		CH TAN. E CAP.	Chip Tantalum Electrolytic Capacitor
		CH AL BP E CAP.	Chip Tantalum Bi-Polar Electrolytic Capacitor

TOLERANCES									
F	G	J	K	M	N	R	H	Z	P
±1%	±2%	±5%	±10%	±20%	±30%	+30% -10%	+50% -10%	+80% -20%	+100% 0%

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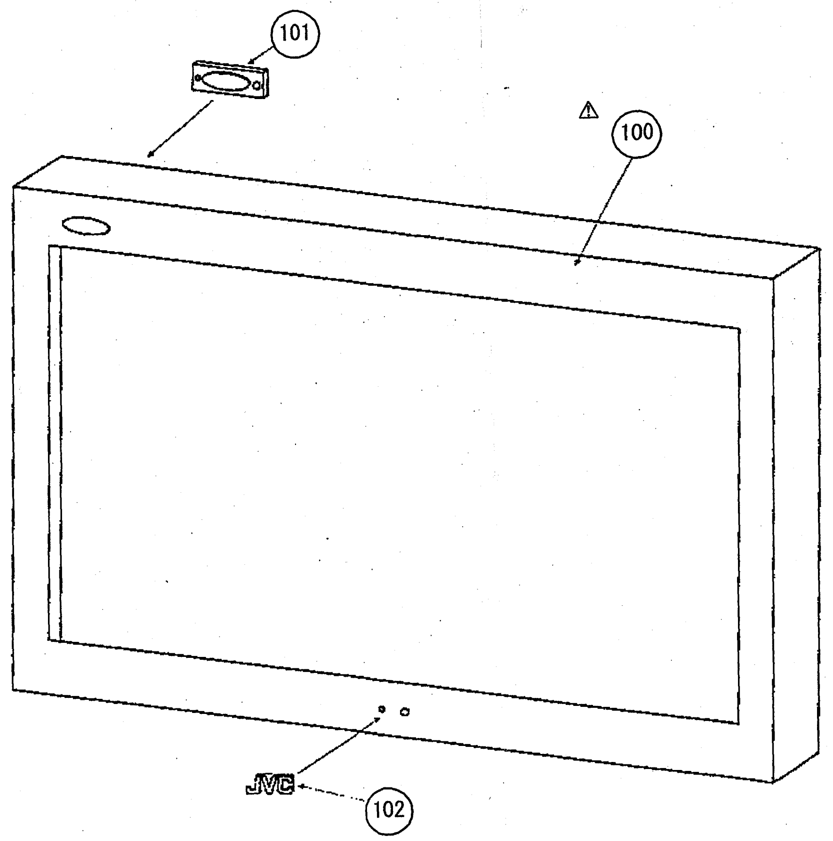
USING P.W. BOARD & REMOTE CONTROL UNIT

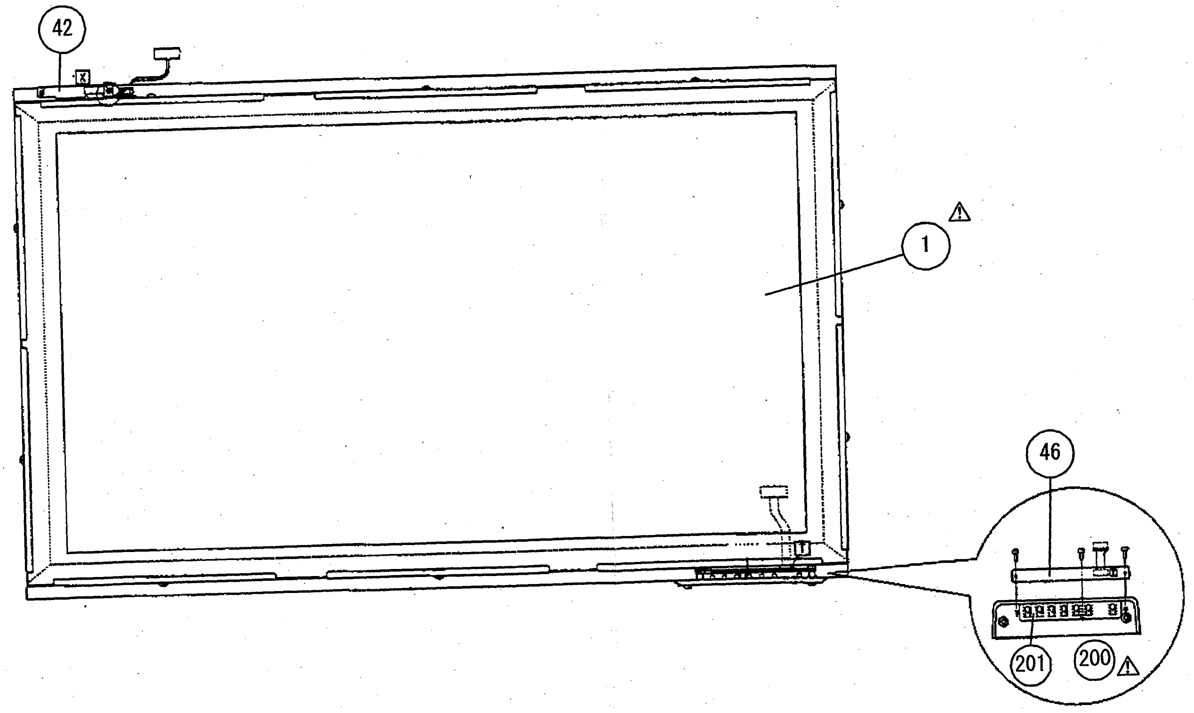
Model P.W.B ASS'Y	GD-V4210PZW GD-V4210PZW-G	GD-V4210PCE GD-V4210PCE-G
DIGITAL P.W.B	FX-1134A	←
CONTROL P.W.B	FX-4066A	←
TERMINAL P.W.B	FX-6070A	×
INTERFACE P.W.B	FX-7012A	←
SENSOR P.W.B	FX-7013A	←
DIVIDER P.W.B	FX-7015A	←
RGB INPUT P.W.B	FX-7017A	←
TEMP SENSOR P.W.B	FX-7018A	←
AV P.W.B	FX-8017A	←
AUDIO P.W.B	FX-8018A	←
REMOTE P.W.B	FX-8019A	←
FILTER P.W.B	FX-9073A	←
REMOTE CONTROL UNIT	RM-C575-1	←

EXPLODED VIEW PARTS LIST

⚠	Ref.No.	Part No.	Part Name	Description	Local
⚠	1	LC31401-001A	FRONT FILTER		
⚠	2	QLE0010-001	PDP PANEL		
	3	QYSPSPD5010Z	SCREW	×4	
	4	QAR0158-001	FAN MOTOR	×4	
	5	LC40587-001A	SCREW	×8	
	6	QAS0011-002	SPEAKER	×2	
	7	QYSPSP3008Z	SCREW	×4	
⚠	8	QAL0206-001	POWER UNIT ASSY		
	9	LC20630-001C	INLET PANEL		
⚠	10	QNC0078-001	AC INLET		
	11	QYSSSP3010M	SCREW	×2	
	12	QNB0036-001	RETAINER	×2	
⚠	13	QSW0699-001	SEESAW SWITCH		
	14	QYSPSPD3008M	SCREW	×3	
	15	QYSBSF3012M	TAPPING SCREW	×2	
	16	QYSBSF3012M	TAPPING SCREW		
	17	LC20694-001B	TERMINAL PANEL	GD-V4210PZW/-G	
	17	LC20694-002A	TERMINAL PANEL	GD-V4210PCE/-G	
	18	QYSPSPD3008M	SCREW	×3	
	19	QYSBSF3012M	TAPPING SCREW	×5 GD-V4210PZW/-G ONLY	
	20	LC31066-002A	SOFT GASKET	×2	
⚠	21	QQR0491-001	FILTER	×7	
	22	LC10538-002A	BACK FRAME	×2	
	23	QYSPSPD4008Z	SCREW	×17	
⚠	24	LC20512-003A	INSULATOR		
	25	LC10891-001C	REAR COVER		
	26	QYSPSPD3008M	SCREW	×22	
⚠	27	LC30959-001B	SPACER(A)		
⚠	28	LC30960-001B	SPACER(B)		
	29	QYNNS3000Z	NUT	×4	
	30	LC20767-001A	CONNECTOR COVER		
	31	LC31399-001B	REAR GUARD		
	32	QYSPSPD3008M	SCREW	×3	
	33	QYSBSF3012M	TAPPING SCREW	×6	
⚠	34	LC20453-008B	ROLL R LABEL	GD-V4210PZW	
⚠	34	LC20453-009B	ROLL R LABEL	GD-V4210PZW-G	
⚠	34	LC20453-010B	ROLL R LABEL	GD-V4210PCE	
⚠	34	LC20453-011B	ROLL R LABEL	GD-V4210PCE-G	
	35	LC31038-006A	FCC LABEL	GD-V4210PZW ONLY	
	36	WJJ0113-001A	SPEAKER WIRE		
⚠	37	LC20417-002A	INSULATOR(A)		
⚠	38	LC40528-002A	INSULATOR(A)		
	39	LC31066-003A	SOFT GASKET	×3	
	40	QNB0037-001	RETAINER	×2	
	41	------------	TEMP SENSOR PWB	FX-7018A	
	42	------------	SENSOR PWB ASSY	FX-7013A	
	43	------------	AV PWB ASSY	FX-8017A	
	44	------------	AUDIO PWB ASSY	FX-8018A	
	45	------------	RGB INPUT PWB AS	FX-7017A	
	46	------------	CONTROL PWB ASSY	FX-4066A	
	47	------------	TERMINAL PWB ASSY	FX-6070A GD-V4210PZW/-G ONLY	
	48	------------	INTERFACE PWB AS	FX-7012A	
	49	------------	DIVIDER PWB ASSY	FX-7015A	
	50	------------	REMOTE PWB ASSY	FX-8019A	
	51	------------	FILTER PWB ASSY	FX-9073A	
	52	------------	DIGITAL PWB ASSY	FX-1134A	
⚠	100	LC10528-005A	FRNOT PANEL ASSY	Inc.No.101~2 GD-V4210PZW/V4210PCE	
⚠	100	LC10528-006A	FRONT PANEL ASSY	Inc.No.101~2 GD-V4210PZW-G/V4210PCE-G	
	101	LC40454-001C	REMOCON WINDOW		
	102	LC40819-001A	JVC MARK		
⚠	200	LC20358-001B	CONTROL BASE ASS	Inc.No.201 GD-V4210PZW/V4210PCE	
⚠	200	LC20358-002A	CONTROL BASE ASS	Inc.No.201 GD-V4210PZW-G/V4210PCE-G	
	201	LC30852-001A	CONTROL SHEET		

EXPLODED VIEW





■ DIFFERENCE LIST

Because the contents of the program were changed, a PWB ASS'Y No. was changed

●USING P.W. BOARD & REMOTE CONTROL UNIT (Page3-2)

Model / PWB ASS'Y	PWB ASS'Y No.				Description
	GD-V4210PZW **GD-V4210PZW-G**	**GD-V4210PCE** **GD-V4210PCE-G** **GD-V4211PCE**	**GD-V4210PZW/A** **GD-V4210PZW-G/A**	**GD-V4210PCE/A** **GD-V4210PCE-G/A** **GD-V4211PCE/A**	
DIGITAL P.W.B	**FX-1134A**	←	**FX-1144A**	←	Interchagable
CONTROL P.W.B	**FX-4066A**	←	**FX-4070A**	←	↑
TERMINAL P.W.B	**FX-6070A**	×	**FX-6074A**	×	↑
INTERFACE P.W.B	**FX-7012A**	←	**FX-7024A**	←	↑
SENSOR P.W.B	**FX-7013A**	←	**FX-7021A**	←	↑
DIVIDER P.W.B	**FX-7015A**	←	**FX-7025A**	←	↑
RGB INPUT P.W.B	**FX-7017A**	←	**FX-7022A**	←	↑
TEMP SENESOR P.W.B	**FX-7018A**	←	**FX-7023A**	←	↑
AV P.W.B	**FX-8017A**	←	**FX-8023A**	←	↑
AUDIO P.W.B	**FX-8018A**	←	**FX-8024A**	←	↑
REMOTE P.W.B	**FX-8019A**	←	**FX-8025A**	←	↑
FILTER P.W.B	**FX-9073A**	←	**FX-9081A**	←	↑

●EXPLODED VIEW PARTS LIST (Page 3-3)

⚠	Ref. No.	Parts No.		Parts Name	Description
		GD-V4210PZW **GD-V4210PZW-G** **GD-V4210PCE** **GD-V4210PCE-G** **GD-V4211PCE**	**GD-V4210PZW/A** **GD-V4210PZW-G/A** **GD-V4210PCE/A** **GD-V4210PCE-G/A** **GD-V4211PCE/A**		
⚠	1	LC31402-001B (GD-V4211PCE)	LC31402-001C (GD-V4211PCE/A)	FRONT FILTER	Issue No.51767B
⚠	2	QLE0010-001	QLE0014-001	PDP (PANEL)	
		———	LC41204-001A	SPACER	ADDITION(×10)
		———	QYSPSPL4016N	SCREW	ADDITION(×10)
⚠	24	LC20512-003A	LC20961-001A	INSULATOR	
	25	LC10891-001C	LC10891-002A	REAR COVER	The shape of the ventilator which is in the rear cover is different.
⚠	34	LC20453-008B (GD-V4210PZW)	LC20453-018B-0L (GD-V4210PZW/A)	ROLL R LABEL	
		LC20453-009B (GD-V4210PZW-G)	LC20453-019B-0L (GD-V4210PZW-G/A)	ROLL R LABEL	
		LC20453-010B (GD-V4210PCE)	LC20453-020A-0L (GD-V4210PCE/A)	ROLL R LABEL	
		LC20453-011B (GD-V4210PCE-G)	LC20453-021A-0L (GD-V4210PCE-G/A)	ROLL R LABEL	
		LC20453-013A (GD-V4211PCE)	LC20453-022A-0L (GD-V4211PCE/A)	ROLL R LABEL	Issue No.51767B

●PACKING PARTS LIST (Page 3-18)

⚠	Ref. No.	Parts No.		Parts Name	Description
		GD-V4210PZW **GD-V4210PZW-G** **GD-V4210PCE** **GD-V4210PCE-G** **GD-V4211PCE**	**GD-V4210PZW/A** **GD-V4210PZW-G/A** **GD-V4210PCE/A** **GD-V4210PCE-G/A** **GD-V4211PCE/A**		
⚠	16	QQR0491-001	———	FILTER	DELETE

JVC

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PROJECTION & SYSTEM NETWORK BUSINESS UNIT 12, 3-chome,Moriya-cho, Kanagawa-ku, Yokohama, Kanagawa-prefecture, 221-8528, Japan